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Part 9—Direct And Venus Swingby Trajectories To Mercury

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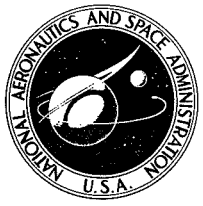
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SPACE FLIGHT HANDBOOKS VOLUME III

PLANETARY FLIGHT HANDBOOK

Part 9—Direct And Venus Swingby Trajectories To Mercury

Prepared under contract
for NASA by
General Dynamics



Scientific and Technical Information Division
OFFICE OF TECHNOLOGY UTILIZATION 1970
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
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FOREWORD

This volume of the NASA Planetary Flight Handbook contains trajectory data to aid the mission analyst in planning unmanned missions to Mercury. Both the direct and Venus swingby mission modes are included for the time period 1973 to 1985. It is intended that this handbook provide comprehensive data for such missions and that it be timely enough to be of value in the analysis of missions that might take place early in the 1970's.

This volume of the NASA SP-35 series of handbooks was prepared under the direction of Mike Poteet by the Fort Worth Division of General Dynamics under Contract NAS 2-4982. In addition to the credit which is due to the study manager, credit is also given to Carolyn Allen for her efforts in preparing the contour charts and to Sharon Leifeste, Beth Bryant, and Robert Perez, who assisted in the preparation of this volume.

Susan Norman
NASA, OART Mission Analysis Division
August 1969

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Section 1

GENERAL DISCUSSION

This handbook contains trajectory data and related information for (one-way) direct flyby and Venus swingby missions to Mercury in the period 1973-1985.

Background Information

Interest in missions to Mercury has increased considerably in the past few years. Such missions could make a substantial contribution to our knowledge both of the planet itself and also the environment near the Sun. From the standpoint of planetary data, Mercury missions would provide information not only on the largely unknown characteristics of the atmosphere and magnetic field but also on the gross surface features and planetary mass. Since the planet has no known natural satellites, mass determinations have depended upon perturbations of the orbits of asteriods and of the planet Venus. As a result of this, there is considerable uncertainty in the currently accepted value of mass. Similarly, severe constraints on visual observation (i.e. the relatively small angular separation from the Sun and the small angular diameter of the planet as seen from Earth) have limited effective determination of surface characteristics. What observations there have been, coupled with radar and photometric data, seem to indicate the surface is rather like that of the Moon; however, knowledge of the surface features of Mercury remains rudimentary at best.

The Mercury launch opportunities included in this handbook span the years from 1973 to 1985. This 13-year period covers one Earth-Mercury synodic cycle. Earlier launch opportunities are not included since the publication date is too late for this handbook to be of use in preliminary planning for missions before 1973. Due to high energy requirements for orbiter missions and the relatively near-future time span considered, the detailed direct trajectory data in this handbook include only those yearly launch opportunities which are best suited to Mercury flyby missions.

Launch opportunities for direct missions to Mercury occur every year. Each of these launch opportunities occurs near the date of an inferior conjunction of Mercury. Since Earth-Mercury inferior conjunctions occur at intervals of about 116 days, there are always three direct launch opportunities (and occasionally one additional opportunity) in each calendar year. As a result of the relatively large inclination and eccentricity of Mercury, however, only one of these three

is of real interest for flyby missions. This is the third launch opportunity of a calendar year (or third inferior conjunction). This opportunity generally yields the lowest Earth departure ΔV requirements since arrival occurs near aphelion and the descending node of Mercury's orbit. For these missions the absolute minimum departure energy is about 0.21 Earth mean orbital speed (EMOS)(40 km^2/sec^2) and a typical mission duration is on the order of 110 days. For orbiter missions the most favorable energy requirements are associated with arrival at Mercury near its perihelion. However, the energy requirements for orbiter missions vary considerably with launch opportunity, since low energy transfers to perihelion are not available in every year. In general, the first yearly launch opportunity is the best for orbiter missions. For reasons discussed earlier, this yearly launch opportunity is not given in the tabular data. However, the mission characteristics of the minimum Earth departure ΔV trajectories for this as well as the second and fourth (when it occurs) yearly opportunities are given in Table 3-1 of Section 3. The minimum <u>total</u> ΔV orbiter missions generally have characteristics similar to those of the minimum Earth departure ΔV missions.

Venus swingby launch opportunities occur at 19-month intervals (one Earth-Venus synodic period). Due to the phasing between Venus and Mercury the trajectory type which provides both low departure energy and unpowered swingbys of Venus is not necessarily the same for each launch opportunity. As a result, there is considerable variation in the mission duration of the minimum energy trajectories. Typical flight times (associated with the minimum energy trajectories) range from 150 days to 260 days depending upon the launch opportunity. Absolute minimum energy requirements for unpowered Venus swingby trajectories to Mercury during the period from 1973 to 1985 are about 0.14 EMOS (18 km^2/sec^2).

As indicated by References 1-9, most of the recent emphasis on missions to Mercury has been on the swingby mode. The primary reason for this is, of course, the significant reduction in Earth departure energy requirements which can be obtained by using a Venus swingby to reach Mercury. In addition, the swingby mode makes possible the observation of both Venus and Mercury in the scope of a single mission. However, the swingby mode does have certain disadvantages when compared to the direct mode. These include an increase in mission duration, an increase in system and operational complexity, and a 19-month interval between launch opportunities. Another significant limitation is that unpowered swingby missions are available only in relatively restricted regions

of Earth departure date and Mercury arrival date. This limitation, however, can be eased to a certain extent by employing a powered swingby maneuver at Venus. The resulting increase in the available departure and arrival periods can also yield a reduction in departure energy requirements; the swingby data in this handbook cover both unpowered and powered Venus encounters.

Organization

Graphical and tabular trajectory data for both the direct and the Venus swingby missions to Mercury are contained in this volume. An explanatory text, of which this discussion is a part, comprises Section 1. The table of planetary constants used in the trajectory computations (Table 2-1) and a set of auxiliary charts for determining the incremental velocity (ΔV) requirements for departure from Earth and, when required, during Venus encounter are contained in Section 2. A table of the inferior conjunctions of Mercury (Table 2-2) and a table of planetary ephemerides (Table 2-3) for the years 1973 to 1985 are also contained in Section 2.

The trajectory data are presented graphically in Sections 3 and 4. The data in Section 3 are for the direct trajectories to Mercury. These consist of one contour chart for each calendar year. Only data for the third launch opportunity in the indicated calendar year is presented on the contour chart. (See preceding subsection or Section 3.) Each chart contains curves of constant Earth departure hyperbolic excess speed and Mercury arrival excess speed plotted on a grid of Earth departure date and Mercury arrival date. In addition, the minimum Earth departure energy mission for each of the other yearly launch opportunities during the period 1973-1985 is given in Table 3-1.

Section 4 contains similar charts for the Venus swingby missions; one chart is shown for each launch opportunity. Each chart is plotted on a grid of Earth departure date and Mercury arrival date and contains curves of constant Earth departure excess speed, Mercury arrival excess speed, Julian date of swingby, swingby periapsis radius, and (where the periapsis radius would be less than 1.05 Venus radii) swingby ΔV required to achieve a 1.05 radii periapsis.

The tabular trajectory data for the direct missions are contained in Section 5; the tabular data for the Venus swingby missions, in Section 6. The Appendix to this volume consists of a description of a data tape which contains a complete record of the tabular trajectory data.

Computer Program and Methods

The programs used to obtain the trajectory data are based on the patched-conic technique. Input requirements are: a date of departure, a date of arrival, and the set of mean elements defining the departure and arrival planets' orbits. The planetary orbits are treated as eccentric, mutually inclined ellipses. Within the program, the orbital elements are employed to determine the position and velocity of the departure planet and the arrival planet by iteration on Kepler's equation. Given the terminal position vectors and the transfer time, an iterative solution to Lambert's Theorem is used to obtain the elements of the required transfer conic. In order to maintain consistency with previous volumes of the Planetary Flight Handbook, the elements are fixed at their osculating values on 1.5 January 1960. These values are given in Reference 10 and in Section 2 of this volume.

Determination of swingby trajectories requires an additional operation, the specification of the swingby date for which the excess speeds of arrival and departure at the swingby planet are equal (within a specified tolerance). This method assumes that the only effect of a close planetary encounter is to rotate the hyperbolic excess velocity vector. Basically, the method consists of making the series of trajectory calculations implied in the paragraph above. After each computation the excess speeds at the swingby planet are compared and the process is either terminated (if the excess speeds have converged) or it is continued by making a new estimate of the swingby date. The approach used in the swingby program requires that the range of possible swingby dates be specified. This range is divided into a desired number of increments and all Earth-Venus and Venus-Mercury transfer conics are determined. For each specified Earth departure date/Mercury arrival date, the swingby arrival and departure excess speeds for each encounter date are subtracted and sequentially compared. An algebraic sign change between successive differences indicates the existence of a solution; i.e., the desired swingby date lies between the two dates at the swingby planet corresponding to these differences. A linear interpolation scheme is then used to determine the swingby date. The process is assumed to have converged when the difference between the excess speeds is less than or equal to 15 m/sec. Since there may be more than one solution, the entire range of possible swingby dates is examined for every departure/arrival date combination.

Magnetic Tape of Trajectory Data

The tabular trajectory data contained in this volume have been stored on magnetic tape in order to provide access to the trajectory data in a form suitable for direct use by computer programs employed in mission or system studies. The tape is written in a 7-track, blocked BCD format with 20 records per block and is compatible with the 7090/7094 DCS. A detailed description of the organization of the data on the tape is contained in the Appendix.

A copy of the tape may be obtained by submitting a request to the Director, Mission Analysis Division, Office of Advanced Research and Technology, National Aeronautics and Space Administration, Moffett Field, California, 94035. A standard magnetic tape, 2400 feet in length and 1/2 inch in width must accompany the request. The trajectory data will be written on the tape at a density of 800 bits per inch unless another tape density is specified (e.g., 200 bpi or 556 bpi).

Section 2

PLANETARY EPHEMERIDES, CONSTANTS, AND RELATED INFORMATION

This section contains the planetary constants and ephemerides used in the calculation of the interplanetary trajectories. Other information of use to the mission analyst is also included.

The constants used in the trajectory calculations for this handbook are listed in Table 2-1 and were taken from Reference 10 with the exception of the value of the planetary gravitational parameter. This was obtained analytically from the ratio of planetary mass to solar mass and the value of the solar gravitational parameter (1.327×10^{11} km^3/sec^2).

Table 2-2 contains a listing of the inferior conjunctions of Mercury for the years 1973-1985.

The ΔV required to depart from a 185-km circular orbit at Earth is shown in Figure 2-1 as a function of hyperbolic excess speed.

TABLE 2-1

PLANETARY CONSTANTS

	Mercury	Venus	Earth
Semimajor Axis (AU)	0.387099	0.723332	1.0
Eccentricity	0.205627	0.006793	0.016726 .
Sidereal Period (days)	87.96925	224.7007	365.2564
Inclination (deg)	7.00399	3.39423	0.0
Longitude of Ascending Node (deg)	47.85714	76.31972	0.0
Argument of Perihelion (deg)	28.97595	54.68859	102.2525
Mean Anomaly at Epoch *(deg)	145.7896	43.28638	357.9056
Planet Radius (km)	2486.2	6183.7	6374.9
Gravitational Parameter (km^3/sec^2)	22093.0	324895.0	402542.0
True Anomaly of "Vernal Equinox" (deg)	**	**	-102.27
Equatorial Obliquity (deg)	**	**	23.444

* 1.5 January 1960 (JD 2436935.0)

** Unknown; defined as 0.0 for data computation

The turn angle, K, through which the hyperbolic asymptote of the Venus encounter trajectory is deflected is shown in Figure 2-2. The data are presented as a function of excess speed for specific values of periapsis radius. The data were obtained from the equation

$$K = 2 \arcsin \left[1 + \frac{r_p V_\infty^2}{\mu} \right]^{-1}$$

where r_p is the periapsis radius, V_∞ is the excess speed, and μ is the planetary gravitational parameter.

The swingby ΔV requirements are shown in Figure 2-3 as a function of excess speed for constant values of asymptote turn angle correction. These data are based on the method of swingby ΔV computation used in this handbook (and

TABLE 2-2

INFERIOR CONJUNCTIONS OF MERCURY

Date	Julian Date	Longitude
March 12, 1973	244 1755.2	172.4
July 20, 1973	244 1883.7	296.9
Nov. 9, 1973	244 1997.0	47.6
Feb. 24, 1974	244 2103.1	155.1
June 30, 1974	244 2229.2	278.0
Oct. 25, 1974	244 2346.0	31.3
Feb. 8, 1975	244 2451.8	138.4
June 10, 1975	244 2574.3	259.2
Oct. 7, 1975	244 2692.5	3.8
Jan. 23, 1976	244 2800.7	121.9
May 20, 1976	244 2918.7	239.0
Sept. 22, 1976	244 3043.8	358.6
Jan. 5, 1977	244 3149.2	105.3
April 30, 1977	244 3263.9	219.5
Sept. 5, 1977	244 3391.5	341.7
Dec. 21, 1977	244 3499.2	89.2
April 11, 1978	244 3610.1	200.8
Aug. 18, 1978	244 3738.8	324.6
Dec. 6, 1978	244 3848.4	72.8
March 24, 1979	244 3957.2	183.0
Aug. 1, 1979	244 4086.1	307.5
Nov. 20, 1979	244 4197.5	57.6

Date	Julian Date	Longitude
March 4, 1980	244 4304.3	164.9
July 11, 1980	244 4432.0	288.9
Nov. 3, 1980	244 4546.8	40.8
Feb. 17, 1981	244 4652.8	147.8
June 22, 1981	244 4777.9	270.3
Oct. 18, 1981	244 4895.7	24.4
Feb. 1, 1982	244 5001.5	131.2
June 1, 1982	244 5122.3	250.4
Oct. 2, 1982	244 5244.6	8.2
Jan. 16, 1983	244 5350.5	114.7
May 12, 1983	244 5467.1	230.6
Sept. 15, 1983	244 5593.0	351.6
Dec. 31, 1983	244 5699.7	98.2
April 22, 1984	244 5812.5	211.4
Aug. 28, 1984	244 5940.5	335.0
Dec. 14, 1984	244 6049.0	82.0
April 3, 1985	244 6159.0	193.0
Aug. 10, 1985	244 6288.2	317.4
Nov. 28, 1985	244 6398.2	65.9
March 16, 1986	244 6506.1	175.1
July 23, 1986	244 6634.7	299.4
Nov. 13, 1986	244 6747.7	50.0

described in Section 4). Basically, the method assumes that during approach the periapsis radius of the encounter hyperbola is adjusted to some desired value which is clear of the planet's surface and atmosphere. During the outbound leg, at some point which is effectively at infinity relative to the planet, a propulsive ΔV is made which changes the asymptote direction of the modified hyperbola to the direction required to complete the second heliocentric leg of the swingby mission. The equation used is

$$\Delta V = 2\ V_\infty\ \sin\ (\Delta K/2)$$

where V_∞ is the excess speed and ΔK is the turn angle correction, i.e., the required change in asymptote direction. The variable ΔK is the same as the parameter DELK used in the tabular swingby data in Section 6 if a periapsis of 1.05 Venus radii is used; otherwise ΔK is the parameter KAPPA used in the tabular data minus the turn angle obtained from Figure 2-2.

It is intended that Figure 2-2 and Figure 2-3 be used together to determine, for example, the encounter ΔV requirements if a periapsis radius larger or smaller than the value used in this handbook (1.05 Venus radii) is desired. More generally, these figures can be used to determine the swingby ΔV requirement to modify the periapsis radius of any Venus encounter trajectory which passes below the planet's surface if the excess speed and required turn angle of the original (impacting) hyperbola are known.

The remainder of this section contains the ephemerides of Earth, Venus, and Mercury for the years 1973-1985 (Table 2-3). The following information is given: heliocentric radius (R), heliocentric longitude (LONG) and latitude (LAT), and the right ascension (RAS) and declination (DECS) of the sun. In addition, the communication distance (CDIST) from Earth is printed for Venus and Mercury. The angles are expressed in degrees, and the distances in AU. The ephemerides were generated using the fixed-ellipse model of the planetary orbits as described by the elements in Table 2-1. These values are not the most accurate ones available; however, they are sufficiently accurate for preliminary design purposes and make this handbook consistent with the previous volumes of the Planetary Flight Handbook.

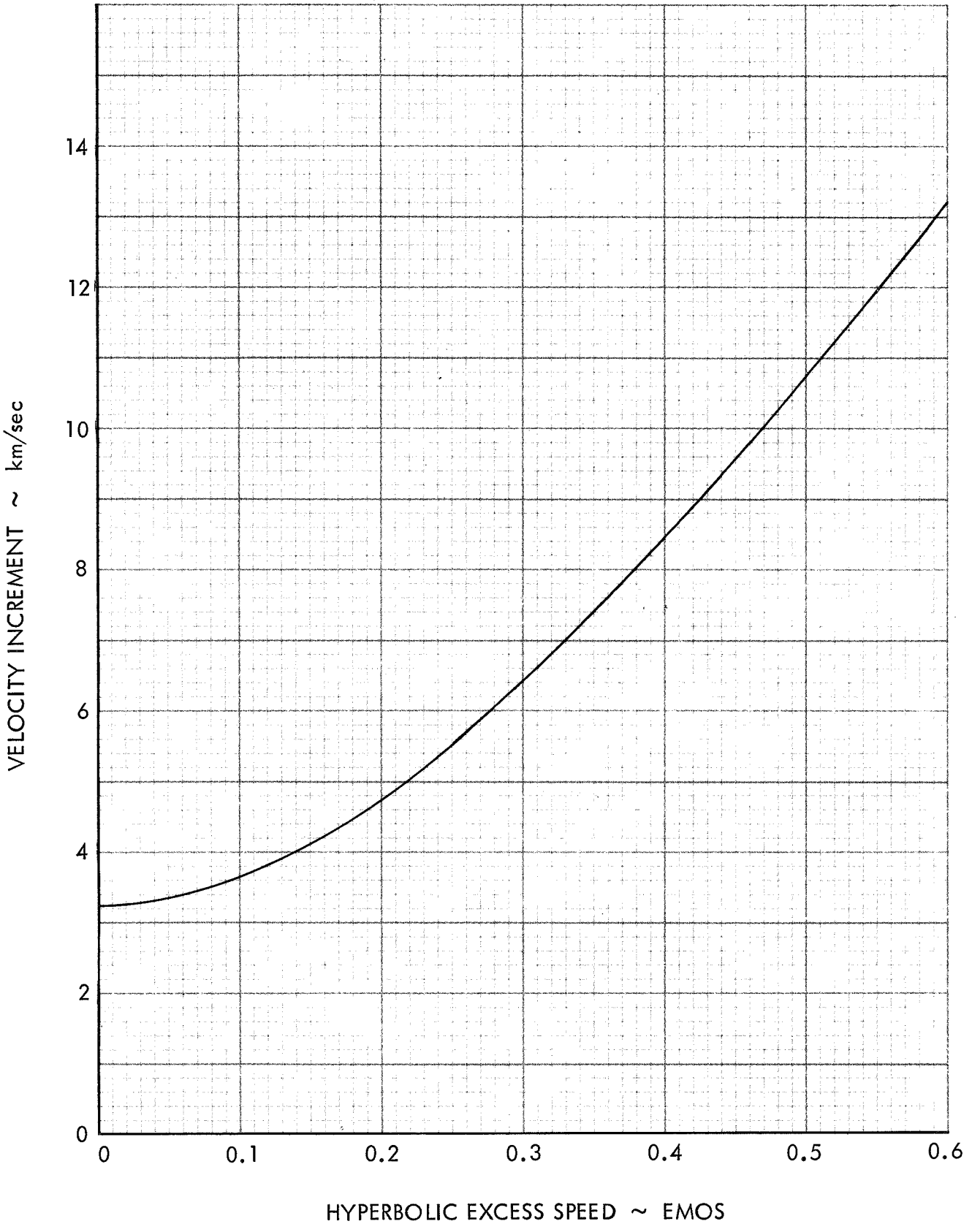


Figure 2-1 VELOCITY INCREMENT REQUIRED TO DEPART 185 - km CIRCULAR EARTH ORBIT

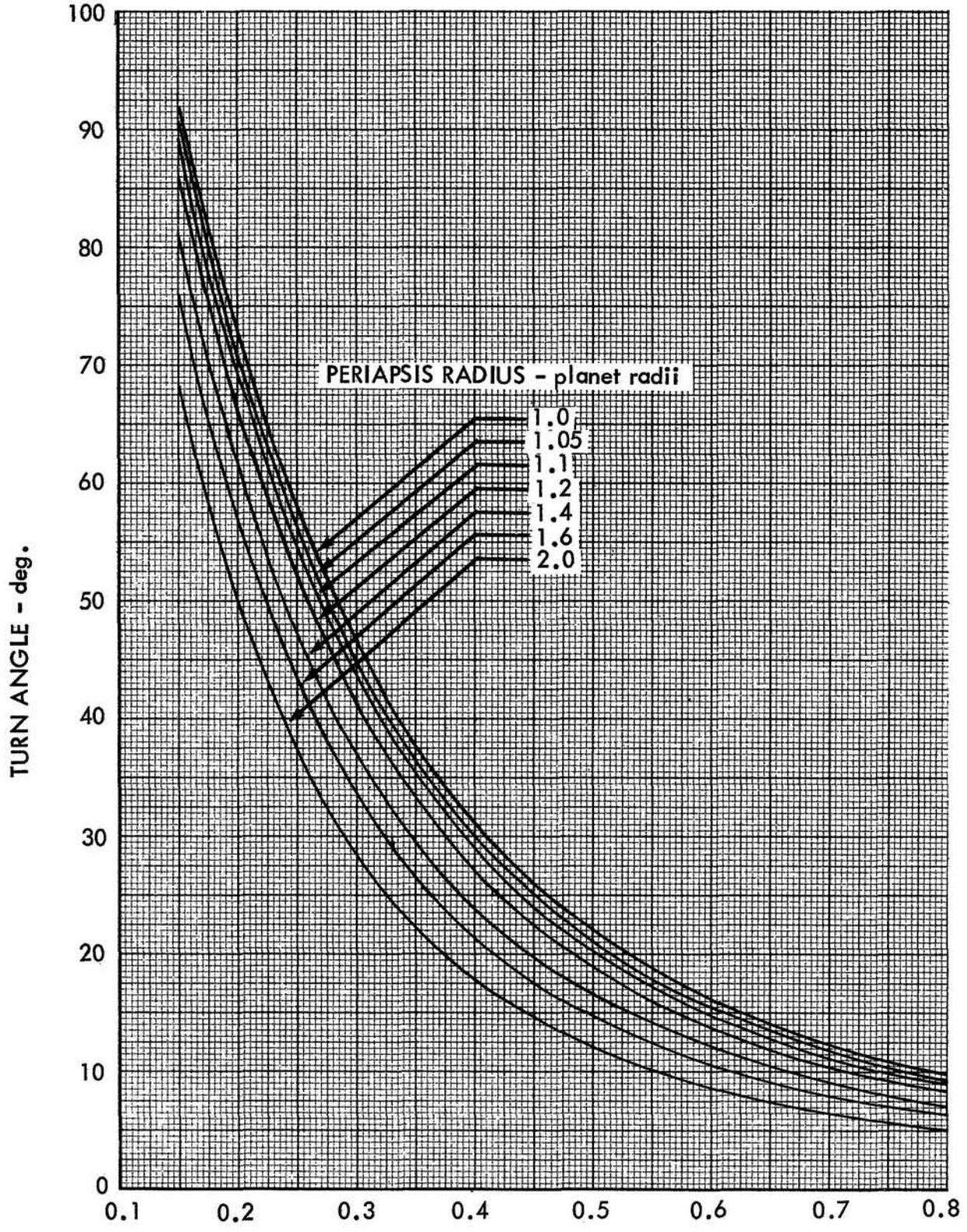


Figure 2.2 HYPERBOLIC ASYMPTOTE TURN ANGLE AT VENUS

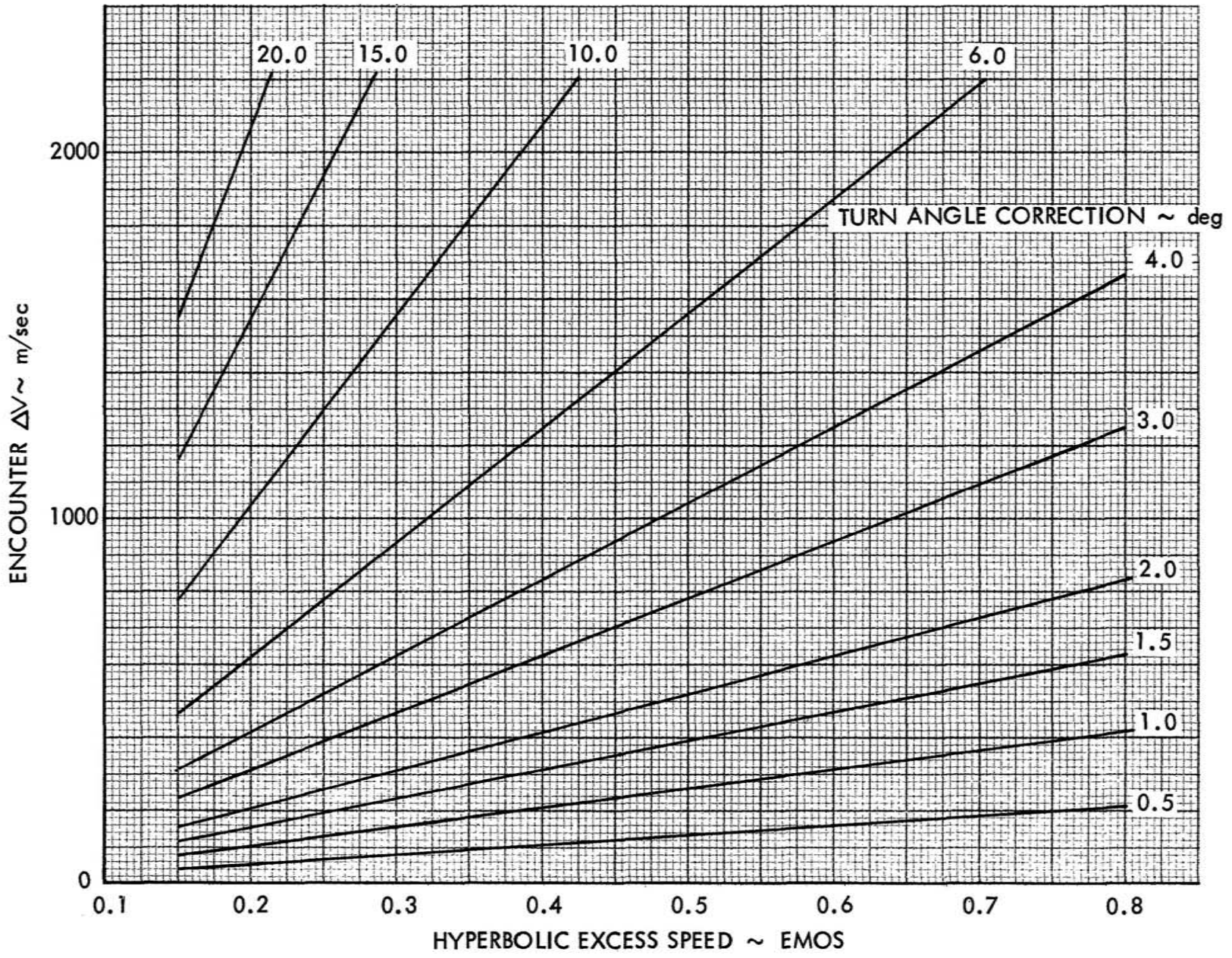


Figure 2-3 VENUS ENCOUNTER ΔV REQUIREMENTS

TABLE 2-3. PLANETARY EPHEMERIDES

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	DIST
41600.0	1972 OCT 9.5	0.46	240.9	-1.58	344.1	0.0	1.37
41602.0	1972 OCT 11.5	0.46	246.4	-2.24	349.7	0.0	1.35
41604.0	1972 OCT 13.5	0.47	251.9	-2.87	355.2	0.0	1.34
41606.0	1972 OCT 15.5	0.47	257.4	-3.47	0.8	0.0	1.32
41608.0	1972 OCT 17.5	0.47	262.9	-4.04	6.3	0.0	1.30
41610.0	1972 OCT 19.5	0.46	268.4	-4.57	11.8	0.0	1.28
41612.0	1972 OCT 21.5	0.46	274.0	-5.07	17.4	0.0	1.25
41614.0	1972 OCT 23.5	0.46	279.7	-5.52	23.1	0.0	1.23
41616.0	1972 OCT 25.5	0.45	285.6	-5.93	28.9	0.0	1.20
41618.0	1972 OCT 27.5	0.45	291.5	-6.28	34.9	0.0	1.17
41620.0	1972 OCT 29.5	0.44	297.7	-6.58	41.0	0.0	1.14
41622.0	1972 NOV 0.5	0.43	304.1	-6.80	47.3	0.0	1.11
41624.0	1972 NOV 2.5	0.42	310.7	-6.95	54.0	0.0	1.07
41626.0	1972 NOV 4.5	0.41	317.7	-7.00	60.9	0.0	1.04
41628.0	1972 NOV 6.5	0.40	325.0	-6.95	68.1	0.0	1.00
41630.0	1972 NOV 8.5	0.39	332.7	-6.77	75.8	0.0	0.96
41632.0	1972 NOV 10.5	0.38	340.9	-6.45	83.9	0.0	0.91
41634.0	1972 NOV 12.5	0.37	349.5	-5.97	92.5	0.0	0.87
41636.0	1972 NOV 14.5	0.36	358.7	-5.31	101.7	0.0	0.83
41638.0	1972 NOV 16.5	0.34	8.5	-4.46	111.4	0.0	0.79
41640.0	1972 NOV 18.5	0.33	18.9	-3.41	121.9	0.0	0.75
41642.0	1972 NOV 20.5	0.33	29.9	-2.17	132.9	0.0	0.72
41644.0	1972 NOV 22.5	0.32	41.4	-0.79	144.5	0.0	0.69
41646.0	1972 NOV 24.5	0.31	53.5	0.69	156.7	0.0	0.68
41648.0	1972 NOV 26.5	0.31	65.9	2.18	169.2	0.0	0.68
41650.0	1972 NOV 28.5	0.31	78.5	3.58	181.8	0.0	0.69
41652.0	1972 DEC 0.5	0.31	91.1	4.81	194.5	0.0	0.71
41654.0	1972 DEC 2.5	0.31	103.5	5.79	206.9	0.0	0.75
41656.0	1972 DEC 4.5	0.32	115.6	6.49	218.9	0.0	0.79
41658.0	1972 DEC 6.5	0.33	127.1	6.88	230.4	0.0	0.83
41660.0	1972 DEC 8.5	0.34	138.1	7.00	241.2	0.0	0.88
41662.0	1972 DEC 10.5	0.35	148.4	6.89	251.4	0.0	0.93
41664.0	1972 DEC 12.5	0.36	158.0	6.58	261.1	0.0	0.97
41666.0	1972 DEC 14.5	0.37	167.1	6.12	270.1	0.0	1.02
41668.0	1972 DEC 16.5	0.38	175.6	5.55	278.5	0.0	1.06
41670.0	1972 DEC 18.5	0.39	183.5	4.91	286.5	0.0	1.10
41672.0	1972 DEC 20.5	0.40	191.1	4.21	294.0	0.0	1.14
41674.0	1972 DEC 22.5	0.41	198.2	3.48	301.2	0.0	1.18
41676.0	1972 DEC 24.5	0.42	205.0	2.73	308.0	0.0	1.21
41678.0	1972 DEC 26.5	0.43	211.5	1.99	314.5	0.0	1.24
41680.0	1972 DEC 28.5	0.44	217.7	1.24	320.8	0.0	1.27
41682.0	1972 DEC 30.5	0.45	223.7	0.51	326.9	0.0	1.29
41684.0	1973 JAN 1.5	0.45	229.6	-0.21	332.8	0.0	1.32
41686.0	1973 JAN 3.5	0.46	235.3	-0.91	338.5	0.0	1.34
41688.0	1973 JAN 5.5	0.46	240.9	-1.59	344.2	0.0	1.35
41690.0	1973 JAN 7.5	0.46	246.5	-2.25	349.8	0.0	1.37
41692.0	1973 JAN 9.5	0.47	252.0	-2.88	355.3	0.0	1.38
41694.0	1973 JAN 11.5	0.47	257.5	-3.48	0.8	0.0	1.40
41696.0	1973 JAN 13.5	0.47	263.0	-4.04	6.4	0.0	1.41
41698.0	1973 JAN 15.5	0.46	268.5	-4.58	11.9	0.0	1.41
41700.0	1973 JAN 17.5	0.46	274.1	-5.07	17.5	0.0	1.42
41702.0	1973 JAN 19.5	0.46	279.8	-5.53	23.2	0.0	1.42
41704.0	1973 JAN 21.5	0.45	285.6	-5.93	29.0	0.0	1.42
41706.0	1973 JAN 23.5	0.45	291.6	-6.29	35.0	0.0	1.42
41708.0	1973 JAN 25.5	0.44	297.8	-6.58	41.1	0.0	1.42
41710.0	1973 JAN 27.5	0.43	304.2	-6.81	47.4	0.0	1.41
41712.0	1973 JAN 29.5	0.42	310.8	-6.95	54.1	0.0	1.40
41714.0	1973 FEB 0.5	0.41	317.8	-7.00	61.0	0.0	1.39
41716.0	1973 FEB 2.5	0.40	325.1	-6.95	68.2	0.0	1.38
41718.0	1973 FEB 4.5	0.39	332.8	-6.77	75.9	0.0	1.36
41720.0	1973 FEB 6.5	0.38	341.0	-6.45	84.0	0.0	1.34
41722.0	1973 FEB 8.5	0.37	349.6	-5.96	92.6	0.0	1.32
41724.0	1973 FEB 10.5	0.36	358.9	-5.30	101.9	0.0	1.29
41726.0	1973 FEB 12.5	0.34	8.6	-4.44	111.6	0.0	1.25
41728.0	1973 FEB 14.5	0.33	19.0	-3.39	122.0	0.0	1.22
41730.0	1973 FEB 16.5	0.33	30.0	-2.15	133.1	0.0	1.17
41732.0	1973 FEB 18.5	0.32	41.6	-0.77	144.7	0.0	1.13
41734.0	1973 FEB 20.5	0.31	53.7	0.71	156.9	0.0	1.08
41736.0	1973 FEB 22.5	0.31	66.1	2.20	169.4	0.0	1.02
41738.0	1973 FEB 24.5	0.31	78.7	3.60	182.0	0.0	0.97
41740.0	1973 FEB 26.5	0.31	91.3	4.83	194.7	0.0	0.91
41742.0	1973 MAR 0.5	0.31	103.7	5.81	207.1	0.0	0.86
41744.0	1973 MAR 2.5	0.32	115.8	6.49	219.1	0.0	0.80
41746.0	1973 MAR 4.5	0.33	127.3	6.89	230.5	0.0	0.76
41748.0	1973 MAR 6.5	0.34	138.2	7.00	241.4	0.0	0.71
41750.0	1973 MAR 8.5	0.35	148.5	6.88	251.6	0.0	0.68
41752.0	1973 MAR 10.5	0.36	158.2	6.57	261.2	0.0	0.65
41754.0	1973 MAR 12.5	0.37	167.2	6.11	270.2	0.0	0.63
41756.0	1973 MAR 14.5	0.38	175.7	5.54	278.7	0.0	0.62
41758.0	1973 MAR 16.5	0.39	183.7	4.89	286.6	0.0	0.61
41760.0	1973 MAR 18.5	0.40	191.2	4.20	294.1	0.0	0.61
41762.0	1973 MAR 20.5	0.42	198.3	3.47	301.3	0.0	0.62
41764.0	1973 MAR 22.5	0.42	205.1	2.72	308.1	0.0	0.63
41766.0	1973 MAR 24.5	0.43	211.6	1.97	314.6	0.0	0.65
41768.0	1973 MAR 26.5	0.44	217.8	1.23	320.9	0.0	0.67
41770.0	1973 MAR 28.5	0.45	223.8	0.49	327.0	0.0	0.69
41772.0	1973 MAR 30.5	0.45	229.7	-0.22	332.9	0.0	0.72
41774.0	1973 APR 1.5	0.46	235.4	-0.92	338.6	0.0	0.74
41776.0	1973 APR 3.5	0.46	241.0	-1.60	344.3	0.0	0.77
41778.0	1973 APR 5.5	0.46	246.6	-2.26	349.9	0.0	0.80
41780.0	1973 APR 7.5	0.47	252.1	-2.89	355.4	0.0	0.83
41782.0	1973 APR 9.5	0.47	257.6	-3.48	0.9	0.0	0.85
41784.0	1973 APR 11.5	0.47	263.1	-4.05	6.4	0.0	0.88
41786.0	1973 APR 13.5	0.46	268.6	-4.59	12.0	0.0	0.91
41788.0	1973 APR 15.5	0.46	274.2	-5.08	17.6	0.0	0.94
41790.0	1973 APR 17.5	0.46	279.9	-5.53	23.3	0.0	0.97
41792.0	1973 APR 19.5	0.45	285.7	-5.94	29.1	0.0	1.00
41794.0	1973 APR 21.5	0.45	291.7	-6.29	35.1	0.0	1.03
41796.0	1973 APR 23.5	0.44	297.9	-6.59	41.2	0.0	1.06
41798.0	1973 APR 25.5	0.43	304.3	-6.81	47.5	0.0	1.09
41800.0	1973 APR 27.5	0.42	310.9	-6.95	54.2	0.0	1.12
41802.0	1973 APR 29.5	0.41	317.9	-7.00	61.1	0.0	1.15
41804.0	1973 MAY 1.5	0.40	325.2	-6.95	68.3	0.0	1.17
41806.0	1973 MAY 3.5	0.39	332.9	-6.76	76.0	0.0	1.20
41808.0	1973 MAY 5.5	0.38	341.1	-6.44	84.1	0.0	1.22
41810.0	1973 MAY 7.5	0.37	349.8	-5.95	92.8	0.0	1.25
41812.0	1973 MAY 9.5	0.36	359.0	-5.29	102.0	0.0	1.27
41814.0	1973 MAY 11.5	0.34	8.8	-4.43	111.8	0.0	1.29
41816.0	1973 MAY 13.5	0.33	19.2	-3.37	122.2	0.0	1.30
41818.0	1973 MAY 15.5	0.32	30.2	-2.13	133.3	0.0	1.31
41820.0	1973 MAY 17.5	0.32	41.8	-0.74	144.9	0.0	1.32
41822.0	1973 MAY 19.5	0.31	53.8	0.73	157.1	0.0	1.32
41824.0	1973 MAY 21.5	0.31	66.3	2.22	169.6	0.0	1.32
41826.0	1973 MAY 23.5	0.31	78.9	3.62	182.2	0.0	1.31
41828.0	1973 MAY 25.5	0.31	91.5	4.84	194.9	0.0	1.29
41830.0	1973 MAY 27.5	0.31	103.9	5.82	207.3	0.0	1.27
41832.0	1973 MAY 29.5	0.32	115.9	6.50	219.2	0.0	1.25
41834.0	1973 JUN 0.5	0.33	127.5	6.89	230.7	0.0	1.22
41836.0	1973 JUN 2.5	0.34	138.4	7.00	241.5	0.0	1.19
41838.0	1973 JUN 4.5	0.35	148.7	6.88	251.8	0.0	1.15
41840.0	1973 JUN 6.5	0.36	158.3	6.57	261.3	0.0	1.12
41842.0	1973 JUN 8.5	0.37	167.3	6.10	270.3	0.0	1.08
41844.0	1973 JUN 10.5	0.38	175.8	5.53	278.8	0.0	1.04
41846.0	1973 JUN 12.5	0.39	183.8	4.88	286.7	0.0	1.01
41848.0	1973 JUN 14.5	0.40	191.3	4.19	294.3	0.0	0.97
41850.0	1973 JUN 16.5	0.42	198.4	3.46	301.4	0.0	0.93
41852.0	1973 JUN 18.5	0.42	205.2	2.71	308.2	0.0	0.90
41854.0	1973 JUN 20.5	0.43	211.7	1.96	314.7	0.0	0.86
41856.0	1973 JUN 22.5	0.44	217.9	1.22	321.0	0.0	0.83
41858.0	1973 JUN 24.5	0.45	223.9	0.48	327.1	0.0	0.80
41860.0	1973 JUN 26.5	0.45	229.8	-0.24	333.0	0.0	0.76
41862.0	1973 JUN 28.5	0.46	235.5	-0.94	338.7	0.0	0.73
41864.0	1973 JUL 0.5	0.46	241.1	-1.61	344.4	0.0	0.71
41866.0	1973 JUL 2.5	0.46	246.7	-2.27	350.0	0.0	0.68
41868.0	1973 JUL 4.5	0.47	252.2	-2.90	355.5	0.0	0.66
41870.0	1973 JUL 6.5	0.47	257.7	-3.49	1.0	0.0	0.64
41872.0	1973 JUL 8.5	0.47	263.2	-4.06	6.5	0.0	0.62
41874.0	1973 JUL 10.5	0.46	268.7	-4.59	12.1	0.0	0.60
41876.0	1973 JUL 12.5	0.46	274.3	-5.09	17.7	0.0	0.59
41878.0	1973 JUL 14.5	0.46	280.0	-5.54	23.4	0.0	0.58
41880.0	1973 JUL 16.5	0.45	285.8	-5.95	29.2	0.0	0.58
41882.0	1973 JUL 18.5	0.45	291.8	-6.30	35.1	0.0	0.58
41884.0	1973 JUL 20.5	0.44	298.0	-6.59	41.3	0.0	0.58
41886.0	1973 JUL 22.5	0.43	304.4	-6.81	47.6	0.0	0.59
41888.0	1973 JUL 24.5	0.42	311.0	-6.96	54.3	0.0	0.61
41890.0	1973 JUL 26.5	0.41	318.0	-7.00	61.2	0.0	0.63
41892.0	1973 JUL 28.5	0.40	325.3	-6.94	68.5	0.0	0.66
41894.0	1973 JUL 30.5	0.39	333.1	-6.76	76.1	0.0	0.69
41896.0	1973 AUG 1.5	0.38	341.2	-6.43	84.3	0.0	0.73
41898.0	1973 AUG 3.5	0.37	349.9	-5.94	92.9	0.0	0.77
41900.0	1973 AUG 5.5	0.36	359.1	-5.27	102.1	0.0	0.81
41902.0	1973 AUG 7.5	0.34	9.0	-4.41	111.9	0.0	0.86
41904.0	1973 AUG 9.5	0.33	19.4	-3.35	122.4	0.0	0.91
41906.0	1973 AUG 11.5	0.32	30.4	-2.11	133.4	0.0	0.96
41908.0	1973 AUG 13.5	0.32	42.0	-0.72	145.1	0.0	1.02
41910.0	1973 AUG 15.5	0.31	54.0	0.76	157.2	0.0	1.07
41912.0	1973 AUG 17.5	0.31	66.5	2.24	169.7	0.0	1.12
41914.0	1973 AUG 19.5	0.31	79.1	3.64	182.4	0.0	1.17
41916.0	1973 AUG 21.5	0.31	91.7	4.86	195.1	0.0	1.21
41918.0	1973 AUG 23.5	0.31	104.1	5.83	207.4	0.0	1.25
41920.0	1973 AUG 25.5	0.32	116.1	6.51	219.4	0.0	1.28
41922.0	1973 AUG 27.5	0.33	127.6	6.89	230.9	0.0	1.31
41924.0	1973 AUG 29.5	0.34	138.5	7.00	241.7	0.0	1.33
41926.0	1973 SEP 0.5	0.35	148.8	6.88	251.9	0.0	1.35
41928.0	1973 SEP 2.5	0.36	158.5	6.56	261.5	0.0	1.37
41930.0	1973 SEP 4.5	0.37	167.5	6.10	270.5	0.0	1.38
41932.0	1973 SEP 6.5	0.38	175.9	5.52	278.9	0.0	1.38
41934.0	1973 SEP 8.5	0.39	183.9	4.87	286.9	0.0	1.39
41936.0	1973 SEP 10.5	0.41	191.4	4.17	294.4	0.0	1.39
41938.0	1973 SEP 12.5	0.42	198.5	3.45	301.5	0.0	1.38

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

	DATE		MERCURY R	LONG	LAT	RAS	DECS	CDIST
41940.0	1973 SEP	14.5	0.42	205.3	2.70	308.3	0.0	1.38
41942.0	1973 SEP	16.5	0.43	211.8	1.95	314.8	0.0	1.37
41944.0	1973 SEP	18.5	0.44	218.0	1.21	321.1	0.0	1.36
41946.0	1973 SEP	20.5	0.45	224.0	0.47	327.1	0.0	1.35
41948.0	1973 SEP	22.5	0.45	229.9	-0.25	333.0	0.0	1.34
41950.0	1973 SEP	24.5	0.46	235.6	-0.95	338.8	0.0	1.32
41952.0	1973 SEP	26.5	0.46	241.2	-1.62	344.5	0.0	1.31
41954.0	1973 SEP	28.5	0.46	246.7	-2.28	350.0	0.0	1.29
41956.0	1973 OCT	0.5	0.47	252.3	-2.90	355.6	0.0	1.27
41958.0	1973 OCT	2.5	0.47	257.7	-3.50	1.1	0.0	1.25
41960.0	1973 OCT	4.5	0.47	263.2	-4.07	6.6	0.0	1.22
41962.0	1973 OCT	6.5	0.46	268.8	-4.60	12.2	0.0	1.20
41964.0	1973 OCT	8.5	0.46	274.4	-5.10	17.8	0.0	1.17
41966.0	1973 OCT	10.5	0.46	280.1	-5.55	23.5	0.0	1.15
41968.0	1973 OCT	12.5	0.45	285.9	-5.95	29.3	0.0	1.12
41970.0	1973 OCT	14.5	0.45	291.9	-6.30	35.2	0.0	1.08
41972.0	1973 OCT	16.5	0.44	298.1	-6.59	41.4	0.0	1.05
41974.0	1973 OCT	18.5	0.43	304.5	-6.82	47.7	0.0	1.02
41976.0	1973 OCT	20.5	0.42	311.1	-6.96	54.4	0.0	0.98
41978.0	1973 OCT	22.5	0.41	318.1	-7.00	61.3	0.0	0.94
41980.0	1973 OCT	24.5	0.40	325.5	-6.94	68.6	0.0	0.90
41982.0	1973 OCT	26.5	0.39	333.2	-6.76	76.2	0.0	0.87
41984.0	1973 OCT	28.5	0.38	341.4	-6.43	84.4	0.0	0.83
41986.0	1973 OCT	30.5	0.37	350.1	-5.93	93.0	0.0	0.79
41988.0	1973 NOV	1.5	0.36	359.3	-5.26	102.2	0.0	0.75
41990.0	1973 NOV	3.5	0.34	9.1	-4.40	112.1	0.0	0.72
41992.0	1973 NOV	5.5	0.33	19.5	-3.34	122.5	0.0	0.70
41994.0	1973 NOV	7.5	0.32	30.6	-2.09	133.6	0.0	0.68
41996.0	1973 NOV	9.5	0.32	42.1	-0.70	145.3	0.0	0.67
41998.0	1973 NOV	11.5	0.31	54.2	0.78	157.4	0.0	0.68
42000.0	1973 NOV	13.5	0.31	66.6	2.27	169.9	0.0	0.70
42002.0	1973 NOV	15.5	0.31	79.3	3.66	182.6	0.0	0.73
42004.0	1973 NOV	17.5	0.31	91.9	4.88	195.2	0.0	0.77
42006.0	1973 NOV	19.5	0.31	104.3	5.84	207.6	0.0	0.81
42008.0	1973 NOV	21.5	0.32	116.3	6.52	219.6	0.0	0.86
42010.0	1973 NOV	23.5	0.33	127.8	6.90	231.0	0.0	0.91
42012.0	1973 NOV	25.5	0.34	138.7	7.00	241.9	0.0	0.96
42014.0	1973 NOV	27.5	0.35	149.0	6.87	252.1	0.0	1.01
42016.0	1973 NOV	29.5	0.36	158.6	6.55	261.6	0.0	1.06
42018.0	1973 DEC	1.5	0.37	167.6	6.09	270.6	0.0	1.10
42020.0	1973 DEC	3.5	0.38	176.1	5.51	279.0	0.0	1.15
42022.0	1973 DEC	5.5	0.39	184.0	4.86	287.0	0.0	1.18
42024.0	1973 DEC	7.5	0.41	191.5	4.16	294.5	0.0	1.22
42026.0	1973 DEC	9.5	0.42	198.6	3.43	301.6	0.0	1.25
42028.0	1973 DEC	11.5	0.43	205.4	2.69	308.4	0.0	1.28
42030.0	1973 DEC	13.5	0.43	211.9	1.94	314.9	0.0	1.31
42032.0	1973 DEC	15.5	0.44	218.1	1.20	321.2	0.0	1.33
42034.0	1973 DEC	17.5	0.45	224.1	0.46	327.2	0.0	1.35
42036.0	1973 DEC	19.5	0.45	230.0	-0.26	333.1	0.0	1.37
42038.0	1973 DEC	21.5	0.46	235.7	-0.96	338.9	0.0	1.39
42040.0	1973 DEC	23.5	0.46	241.3	-1.63	344.6	0.0	1.40
42042.0	1973 DEC	25.5	0.46	246.8	-2.29	350.1	0.0	1.41
42044.0	1973 DEC	27.5	0.47	252.3	-2.91	355.7	0.0	1.42
42046.0	1973 DEC	29.5	0.47	257.8	-3.51	1.2	0.0	1.43
42048.0	1974 JAN	0.5	0.47	263.3	-4.08	6.7	0.0	1.44
42050.0	1974 JAN	2.5	0.46	268.9	-4.61	12.2	0.0	1.44
42052.0	1974 JAN	4.5	0.46	274.5	-5.10	17.9	0.0	1.44
42054.0	1974 JAN	6.5	0.46	280.2	-5.55	23.6	0.0	1.44
42056.0	1974 JAN	8.5	0.45	286.0	-5.96	29.4	0.0	1.43
42058.0	1974 JAN	10.5	0.45	292.0	-6.31	35.3	0.0	1.43
42060.0	1974 JAN	12.5	0.44	298.2	-6.60	41.5	0.0	1.42
42062.0	1974 JAN	14.5	0.43	304.6	-6.82	47.8	0.0	1.41
42064.0	1974 JAN	16.5	0.42	311.3	-6.96	54.5	0.0	1.39
42066.0	1974 JAN	18.5	0.41	318.2	-7.00	61.4	0.0	1.37
42068.0	1974 JAN	20.5	0.40	325.6	-6.94	68.7	0.0	1.35
42070.0	1974 JAN	22.5	0.39	333.3	-6.75	76.4	0.0	1.33
42072.0	1974 JAN	24.5	0.38	341.5	-6.42	84.5	0.0	1.30
42074.0	1974 JAN	26.5	0.37	350.2	-5.93	93.2	0.0	1.27
42076.0	1974 JAN	28.5	0.36	359.4	-5.25	102.4	0.0	1.24
42078.0	1974 JAN	30.5	0.34	9.3	-4.38	112.2	0.0	1.20
42080.0	1974 FEB	1.5	0.33	19.7	-3.32	122.7	0.0	1.15
42082.0	1974 FEB	3.5	0.32	30.7	-2.07	133.8	0.0	1.11
42084.0	1974 FEB	5.5	0.32	42.3	-0.68	145.5	0.0	1.06
42086.0	1974 FEB	7.5	0.31	54.4	0.80	157.6	0.0	1.00
42088.0	1974 FEB	9.5	0.31	66.8	2.29	170.1	0.0	0.95
42090.0	1974 FEB	11.5	0.31	79.5	3.69	182.8	0.0	0.89
42092.0	1974 FEB	13.5	0.31	92.1	4.90	195.4	0.0	0.84
42094.0	1974 FEB	15.5	0.31	104.5	5.86	207.8	0.0	0.78
42096.0	1974 FEB	17.5	0.32	116.5	6.53	219.8	0.0	0.74
42098.0	1974 FEB	19.5	0.33	128.0	6.90	231.2	0.0	0.70
42100.0	1974 FEB	21.5	0.34	138.9	7.00	242.0	0.0	0.67
42102.0	1974 FEB	23.5	0.35	149.1	6.87	252.2	0.0	0.65
42104.0	1974 FEB	25.5	0.36	158.7	6.55	261.8	0.0	0.63
42106.0	1974 FEB	27.5	0.37	167.7	6.08	270.7	0.0	0.63
42108.0	1974 MAR	1.5	0.38	176.2	5.50	279.2	0.0	0.63

	DATE		MERCURY R	LONG	LAT	RAS	DECS	CDIST
42110.0	1974 MAR	3.5	0.39	184.1	4.85	287.1	0.0	0.64
42112.0	1974 MAR	5.5	0.41	191.6	4.15	294.6	0.0	0.66
42114.0	1974 MAR	7.5	0.42	198.7	3.42	301.7	0.0	0.68
42116.0	1974 MAR	9.5	0.43	205.5	2.68	308.5	0.0	0.70
42118.0	1974 MAR	11.5	0.43	212.0	1.93	315.0	0.0	0.73
42120.0	1974 MAR	13.5	0.44	218.2	1.19	321.3	0.0	0.76
42122.0	1974 MAR	15.5	0.45	224.2	0.45	327.3	0.0	0.78
42124.0	1974 MAR	17.5	0.45	230.0	-0.27	333.2	0.0	0.81
42126.0	1974 MAR	19.5	0.46	235.8	-0.97	339.0	0.0	0.84
42128.0	1974 MAR	21.5	0.46	241.4	-1.64	344.6	0.0	0.87
42130.0	1974 MAR	23.5	0.46	246.9	-2.30	350.2	0.0	0.90
42132.0	1974 MAR	25.5	0.47	252.4	-2.92	355.8	0.0	0.93
42134.0	1974 MAR	27.5	0.47	257.9	-3.52	1.3	0.0	0.96
42136.0	1974 MAR	29.5	0.47	263.4	-4.09	6.8	0.0	0.99
42138.0	1974 APR	0.5	0.46	269.0	-4.62	12.3	0.0	1.02
42140.0	1974 APR	2.5	0.46	274.6	-5.11	17.9	0.0	1.04
42142.0	1974 APR	4.5	0.46	280.3	-5.56	23.6	0.0	1.07
42144.0	1974 APR	6.5	0.45	286.1	-5.96	29.5	0.0	1.10
42146.0	1974 APR	8.5	0.45	292.1	-6.31	35.4	0.0	1.12
42148.0	1974 APR	10.5	0.44	298.3	-6.60	41.6	0.0	1.15
42150.0	1974 APR	12.5	0.43	304.7	-6.82	47.9	0.0	1.17
42152.0	1974 APR	14.5	0.42	311.4	-6.96	54.6	0.0	1.20
42154.0	1974 APR	16.5	0.41	318.3	-7.00	61.5	0.0	1.22
42156.0	1974 APR	18.5	0.40	325.7	-6.94	68.8	0.0	1.24
42158.0	1974 APR	20.5	0.39	333.4	-6.75	76.5	0.0	1.26
42160.0	1974 APR	22.5	0.38	341.6	-6.41	84.6	0.0	1.28
42162.0	1974 APR	24.5	0.37	350.3	-5.92	93.3	0.0	1.30
42164.0	1974 APR	26.5	0.35	359.6	-5.24	102.5	0.0	1.31
42166.0	1974 APR	28.5	0.34	9.4	-4.37	112.4	0.0	1.32
42168.0	1974 MAY	0.5	0.33	19.9	-3.30	122.9	0.0	1.33
42170.0	1974 MAY	2.5	0.32	30.9	-2.05	134.0	0.0	1.33
42172.0	1974 MAY	4.5	0.32	42.5	-0.66	145.6	0.0	1.33
42174.0	1974 MAY	6.5	0.31	54.6	0.83	157.8	0.0	1.32
42176.0	1974 MAY	8.5	0.31	67.0	2.31	170.3	0.0	1.30
42178.0	1974 MAY	10.5	0.31	79.6	3.70	183.0	0.0	1.28
42180.0	1974 MAY	12.5	0.31	92.3	4.91	195.6	0.0	1.26
42182.0	1974 MAY	14.5	0.31	104.6	5.87	208.0	0.0	1.23
42184.0	1974 MAY	16.5	0.32	116.7	6.53	220.0	0.0	1.20
42186.0	1974 MAY	18.5	0.33	128.1	6.90	231.4	0.0	1.16
42188.0	1974 MAY	20.5	0.34	139.0	7.00	242.2	0.0	1.12
42190.0	1974 MAY	22.5	0.35	149.3	6.87	252.4	0.0	1.08
42192.0	1974 MAY	24.5	0.36	158.9	6.54	261.9	0.0	1.04
42194.0	1974 MAY	26.5	0.37	167.9	6.07	270.9	0.0	1.00
42196.0	1974 MAY	28.5	0.38	176.3	5.49	279.3	0.0	0.96
42198.0	1974 MAY	30.5	0.39	184.3	4.84	287.2	0.0	0.91
42200.0	1974 JUN	1.5	0.41	191.7	4.14	294.7	0.0	0.88
42202.0	1974 JUN	3.5	0.42	198.8	3.41	301.8	0.0	0.84
42204.0	1974 JUN	5.5	0.43	205.6	2.67	308.6	0.0	0.80
42206.0	1974 JUN	7.5	0.43	212.1	1.92	315.1	0.0	0.77
42208.0	1974 JUN	9.5	0.44	218.3	1.17	321.4	0.0	0.73
42210.0	1974 JUN	11.5	0.45	224.3	0.44	327.4	0.0	0.70
42212.0	1974 JUN	13.5	0.45	230.1	-0.28	333.3	0.0	0.67
42214.0	1974 JUN	15.5	0.46	235.8	-0.98	339.1	0.0	0.65
42216.0	1974 JUN	17.5	0.46	241.5	-1.65	344.7	0.0	0.62
42218.0	1974 JUN	19.5	0.46	247.0	-2.31	350.3	0.0	0.60
42220.0	1974 JUN	21.5	0.47	252.5	-2.93	355.8	0.0	0.59
42222.0	1974 JUN	23.5	0.47	258.0	-3.53	1.3	0.0	0.57
42224.0	1974 JUN	25.5	0.47	263.5	-4.09	6.9	0.0	0.57
42226.0	1974 JUN	27.5	0.46	269.0	-4.62	12.4	0.0	0.56
42228.0	1974 JUN	29.5	0.46	274.7	-5.12	18.0	0.0	0.56
42230.0	1974 JUL	1.5	0.46	280.4	-5.57	23.7	0.0	0.56
42232.0	1974 JUL	3.5	0.45	286.2	-5.97	29.6	0.0	0.57
42234.0	1974 JUL	5.5	0.45	292.2	-6.32	35.5	0.0	0.59
42236.0	1974 JUL	7.5	0.44	298.4	-6.61	41.7	0.0	0.60
42238.0	1974 JUL	9.5	0.43	304.8	-6.82	48.0	0.0	0.63
42240.0	1974 JUL	11.5	0.42	311.5	-6.96	54.7	0.0	0.65
42242.0	1974 JUL	13.5	0.41	318.5	-7.00	61.6	0.0	0.69
42244.0	1974 JUL	15.5	0.40	325.8	-6.94	68.9	0.0	0.72
42246.0	1974 JUL	17.5	0.39	333.6	-6.75	76.6	0.0	0.76
42248.0	1974 JUL	19.5	0.38	341.8	-6.41	84.8	0.0	0.80
42250.0	1974 JUL	21.5	0.37	350.5	-5.91	93.4	0.0	0.85
42252.0	1974 JUL	23.5	0.35	359.7	-5.23	102.7	0.0	0.89
42254.0	1974 JUL	25.5	0.34	9.6	-4.35	112.5	0.0	0.94
42256.0	1974 JUL	27.5	0.33	20.0	-3.28	123.0	0.0	0.99
42258.0	1974 JUL	29.5	0.32	31.1	-2.03	134.1	0.0	1.04
42260.0	1974 AUG	0.5	0.32	42.7	-0.63	145.8	0.0	1.09
42262.0	1974 AUG	2.5	0.31	54.8	0.85	158.0	0.0	1.14
42264.0	1974 AUG	4.5	0.31	67.2	2.33	170.5	0.0	1.18
42266.0	1974 AUG	6.5	0.31	79.8	3.72	183.2	0.0	1.22
42268.0	1974 AUG	8.5	0.31	92.4	4.93	195.8	0.0	1.26
42270.0	1974 AUG	10.5	0.31	104.8	5.88	208.2	0.0	1.29
42272.0	1974 AUG	12.5	0.32	116.8	6.54	220.1	0.0	1.31
42274.0	1974 AUG	14.5	0.33	128.3	6.91	231.6	0.0	1.33
42276.0	1974 AUG	16.5	0.34	139.2	7.00	242.4	0.0	1.35
42278.0	1974 AUG	18.5	0.35	149.4	6.86	252.5	0.0	1.36

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST		DATE	R	LONG	LAT	RAS	DECS	CDIST
42280.0	1974 AUG 20.5	0.36	159.0	6.54	262.0	0.0	1.36	42450.0	1975 FEB 6.5	0.33	128.7	6.91	231.9	0.0	0.67
42282.0	1974 AUG 22.5	0.37	168.0	6.06	271.0	0.0	1.37	42452.0	1975 FEB 8.5	0.34	139.5	7.00	242.7	0.0	0.65
42284.0	1974 AUG 24.5	0.38	176.4	5.49	279.4	0.0	1.37	42454.0	1975 FEB 10.5	0.35	149.7	6.86	252.9	0.0	0.65
42286.0	1974 AUG 26.5	0.39	184.4	4.83	287.3	0.0	1.36	42456.0	1975 FEB 12.5	0.36	159.3	6.52	262.3	0.0	0.65
42288.0	1974 AUG 28.5	0.41	191.9	4.13	294.8	0.0	1.35	42458.0	1975 FEB 14.5	0.37	168.3	6.05	271.3	0.0	0.67
42290.0	1974 AUG 30.5	0.42	198.9	3.40	301.9	0.0	1.35	42460.0	1975 FEB 16.5	0.38	176.7	5.47	279.7	0.0	0.68
42292.0	1974 SEP 1.5	0.43	205.7	2.65	308.7	0.0	1.33	42462.0	1975 FEB 18.5	0.40	184.6	4.81	287.6	0.0	0.71
42294.0	1974 SEP 3.5	0.43	212.1	1.91	315.2	0.0	1.32	42464.0	1975 FEB 20.5	0.41	192.1	4.11	295.0	0.0	0.73
42296.0	1974 SEP 5.5	0.44	218.4	1.16	321.5	0.0	1.31	42466.0	1975 FEB 22.5	0.42	199.2	3.38	302.1	0.0	0.76
42298.0	1974 SEP 7.5	0.45	224.4	0.43	327.5	0.0	1.29	42468.0	1975 FEB 24.5	0.43	205.9	2.63	308.9	0.0	0.79
42300.0	1974 SEP 9.5	0.45	230.2	-0.29	333.4	0.0	1.27	42470.0	1975 FEB 26.5	0.43	212.3	1.88	315.4	0.0	0.82
42302.0	1974 SEP 11.5	0.46	235.9	-0.99	339.2	0.0	1.25	42472.0	1975 MAR 0.5	0.44	218.6	1.14	321.6	0.0	0.86
42304.0	1974 SEP 13.5	0.46	241.5	-1.67	344.8	0.0	1.23	42474.0	1975 MAR 2.5	0.45	224.6	0.41	327.7	0.0	0.89
42306.0	1974 SEP 15.5	0.47	247.1	-2.32	350.4	0.0	1.21	42476.0	1975 MAR 4.5	0.45	230.4	-0.31	333.6	0.0	0.92
42308.0	1974 SEP 17.5	0.47	252.6	-2.94	355.9	0.0	1.19	42478.0	1975 MAR 6.5	0.46	236.1	-1.01	339.3	0.0	0.95
42310.0	1974 SEP 19.5	0.47	258.1	-3.54	1.4	0.0	1.16	42480.0	1975 MAR 8.5	0.46	241.7	-1.69	345.0	0.0	0.98
42312.0	1974 SEP 21.5	0.47	263.6	-4.10	7.0	0.0	1.14	42482.0	1975 MAR 10.5	0.47	247.3	-2.34	350.6	0.0	1.01
42314.0	1974 SEP 23.5	0.46	269.1	-4.63	12.5	0.0	1.11	42484.0	1975 MAR 12.5	0.47	252.8	-2.96	356.1	0.0	1.03
42316.0	1974 SEP 25.5	0.46	274.7	-5.12	18.1	0.0	1.08	42486.0	1975 MAR 14.5	0.47	258.2	-3.56	1.6	0.0	1.06
42318.0	1974 SEP 27.5	0.46	280.4	-5.57	23.8	0.0	1.05	42488.0	1975 MAR 16.5	0.47	263.8	-4.12	7.1	0.0	1.09
42320.0	1974 SEP 29.5	0.45	286.3	-5.98	29.6	0.0	1.02	42490.0	1975 MAR 18.5	0.46	269.3	-4.65	12.7	0.0	1.11
42322.0	1974 OCT 1.5	0.45	292.3	-6.32	35.6	0.0	0.99	42492.0	1975 MAR 20.5	0.46	274.9	-5.14	18.3	0.0	1.14
42324.0	1974 OCT 3.5	0.44	298.5	-6.61	41.8	0.0	0.96	42494.0	1975 MAR 22.5	0.46	280.6	-5.59	24.0	0.0	1.16
42326.0	1974 OCT 5.5	0.43	304.9	-6.83	48.1	0.0	0.92	42496.0	1975 MAR 24.5	0.45	286.5	-5.99	29.8	0.0	1.19
42328.0	1974 OCT 7.5	0.42	311.6	-6.96	54.8	0.0	0.89	42498.0	1975 MAR 26.5	0.44	292.5	-6.33	35.8	0.0	1.21
42330.0	1974 OCT 9.5	0.41	318.6	-7.00	61.7	0.0	0.85	42500.0	1975 MAR 28.5	0.44	298.7	-6.62	42.0	0.0	1.23
42332.0	1974 OCT 11.5	0.40	325.9	-6.94	69.0	0.0	0.82	42502.0	1975 MAR 30.5	0.43	305.1	-6.83	48.3	0.0	1.25
42334.0	1974 OCT 13.5	0.39	333.7	-6.74	76.7	0.0	0.78	42504.0	1975 APR 1.5	0.42	311.8	-6.97	55.0	0.0	1.27
42336.0	1974 OCT 15.5	0.38	341.9	-6.40	84.9	0.0	0.75	42506.0	1975 APR 3.5	0.41	318.8	-7.00	61.9	0.0	1.28
42338.0	1974 OCT 17.5	0.37	350.6	-5.90	93.6	0.0	0.72	42508.0	1975 APR 5.5	0.40	326.2	-6.93	69.3	0.0	1.30
42340.0	1974 OCT 19.5	0.35	359.9	-5.21	102.8	0.0	0.70	42510.0	1975 APR 7.5	0.39	333.9	-6.73	77.0	0.0	1.31
42342.0	1974 OCT 21.5	0.34	9.7	-4.34	112.7	0.0	0.68	42512.0	1975 APR 9.5	0.38	342.2	-6.39	85.2	0.0	1.32
42344.0	1974 OCT 23.5	0.33	20.2	-3.26	123.2	0.0	0.67	42514.0	1975 APR 11.5	0.37	350.9	-5.88	93.9	0.0	1.33
42346.0	1974 OCT 25.5	0.32	31.3	-2.01	134.3	0.0	0.67	42516.0	1975 APR 13.5	0.35	0.2	-5.19	103.1	0.0	1.34
42348.0	1974 OCT 27.5	0.32	42.9	-0.61	146.0	0.0	0.68	42518.0	1975 APR 15.5	0.34	10.0	-4.31	113.0	0.0	1.34
42350.0	1974 OCT 29.5	0.31	55.0	0.87	158.2	0.0	0.71	42520.0	1975 APR 17.5	0.33	20.5	-3.23	123.5	0.0	1.33
42352.0	1974 NOV 0.5	0.31	67.4	2.36	170.7	0.0	0.74	42522.0	1975 APR 19.5	0.32	31.6	-1.97	134.7	0.0	1.33
42354.0	1974 NOV 2.5	0.31	80.0	3.74	183.4	0.0	0.78	42524.0	1975 APR 21.5	0.32	43.2	-0.57	146.4	0.0	1.32
42356.0	1974 NOV 4.5	0.31	92.6	4.95	196.0	0.0	0.83	42526.0	1975 APR 23.5	0.31	55.4	0.92	158.6	0.0	1.30
42358.0	1974 NOV 6.5	0.31	105.0	5.89	208.4	0.0	0.89	42528.0	1975 APR 25.5	0.31	67.8	2.40	171.1	0.0	1.27
42360.0	1974 NOV 8.5	0.32	117.0	6.55	220.3	0.0	0.94	42530.0	1975 APR 27.5	0.31	80.4	3.78	183.8	0.0	1.25
42362.0	1974 NOV 10.5	0.33	128.5	6.91	231.7	0.0	0.99	42532.0	1975 APR 29.5	0.31	93.0	4.98	196.4	0.0	1.21
42364.0	1974 NOV 12.5	0.34	139.4	7.00	242.5	0.0	1.05	42534.0	1975 MAY 1.5	0.31	105.4	5.92	208.8	0.0	1.17
42366.0	1974 NOV 14.5	0.35	149.6	6.86	252.7	0.0	1.09	42536.0	1975 MAY 3.5	0.32	117.4	6.57	220.7	0.0	1.13
42368.0	1974 NOV 16.5	0.36	159.2	6.53	262.2	0.0	1.14	42538.0	1975 MAY 5.5	0.33	128.8	6.92	232.1	0.0	1.09
42370.0	1974 NOV 18.5	0.37	168.2	6.06	271.1	0.0	1.18	42540.0	1975 MAY 7.5	0.34	139.7	7.00	242.8	0.0	1.04
42372.0	1974 NOV 20.5	0.38	176.6	5.48	279.5	0.0	1.22	42542.0	1975 MAY 9.5	0.35	149.9	6.85	253.0	0.0	1.00
42374.0	1974 NOV 22.5	0.40	184.5	4.82	287.4	0.0	1.26	42544.0	1975 MAY 11.5	0.36	159.5	6.52	262.5	0.0	0.95
42376.0	1974 NOV 24.5	0.41	192.0	4.12	294.9	0.0	1.29	42546.0	1975 MAY 13.5	0.37	168.4	6.04	271.4	0.0	0.91
42378.0	1974 NOV 26.5	0.42	199.0	3.39	302.0	0.0	1.32	42548.0	1975 MAY 15.5	0.38	176.8	5.46	279.8	0.0	0.87
42380.0	1974 NOV 28.5	0.43	205.8	2.64	308.8	0.0	1.34	42550.0	1975 MAY 17.5	0.40	184.7	4.80	287.7	0.0	0.82
42382.0	1974 DEC 0.5	0.43	212.2	1.89	315.3	0.0	1.36	42552.0	1975 MAY 19.5	0.41	192.2	4.10	295.2	0.0	0.78
42384.0	1974 DEC 2.5	0.44	218.5	1.15	321.6	0.0	1.38	42554.0	1975 MAY 21.5	0.42	199.3	3.37	302.2	0.0	0.75
42386.0	1974 DEC 4.5	0.45	224.5	0.42	327.6	0.0	1.40	42556.0	1975 MAY 23.5	0.43	206.0	2.62	309.0	0.0	0.71
42388.0	1974 DEC 6.5	0.45	230.3	-0.30	333.5	0.0	1.41	42558.0	1975 MAY 25.5	0.43	212.4	1.87	315.5	0.0	0.68
42390.0	1974 DEC 8.5	0.46	236.0	-1.00	339.2	0.0	1.43	42560.0	1975 MAY 27.5	0.44	218.6	1.13	321.7	0.0	0.65
42392.0	1974 DEC 10.5	0.46	241.6	-1.68	344.9	0.0	1.43	42562.0	1975 MAY 29.5	0.45	224.6	0.39	327.8	0.0	0.62
42394.0	1974 DEC 12.5	0.47	247.2	-2.33	350.5	0.0	1.44	42564.0	1975 JUN 0.5	0.45	230.5	-0.32	333.7	0.0	0.60
42396.0	1974 DEC 14.5	0.47	252.7	-2.95	356.0	0.0	1.45	42566.0	1975 JUN 2.5	0.46	236.2	-1.02	339.4	0.0	0.58
42398.0	1974 DEC 16.5	0.47	258.2	-3.55	1.5	0.0	1.45	42568.0	1975 JUN 4.5	0.46	241.8	-1.70	345.1	0.0	0.57
42400.0	1974 DEC 18.5	0.47	263.7	-4.11	7.0	0.0	1.45	42570.0	1975 JUN 6.5	0.47	247.3	-2.35	350.6	0.0	0.56
42402.0	1974 DEC 20.5	0.46	269.2	-4.64	12.6	0.0	1.45	42572.0	1975 JUN 8.5	0.47	252.8	-2.97	356.2	0.0	0.55
42404.0	1974 DEC 22.5	0.46	274.8	-5.13	18.2	0.0	1.44	42574.0	1975 JUN 10.5	0.47	258.3	-3.57	1.7	0.0	0.55
42406.0	1974 DEC 24.5	0.46	280.5	-5.58	23.9	0.0	1.44	42576.0	1975 JUN 12.5	0.47	263.8	-4.13	7.2	0.0	0.55
42408.0	1974 DEC 26.5	0.45	286.4	-5.98	29.7	0.0	1.43	42578.0	1975 JUN 14.5	0.46	269.4	-4.66	12.8	0.0	0.56
42410.0	1974 DEC 28.5	0.45	292.4	-6.33	35.7	0.0	1.41	42580.0	1975 JUN 16.5	0.46	275.0	-5.15	18.4	0.0	0.57
42412.0	1974 DEC 30.5	0.44	298.6	-6.61	41.9	0.0	1.40	42582.0	1975 JUN 18.5	0.46	280.7	-5.59	24.1	0.0	0.59
42414.0	1975 JAN 1.5	0.43	305.0	-6.83	48.2	0.0	1.38	42584.0	1975 JUN 20.5	0.45	286.6	-5.99	29.9	0.0	0.61
42416.0	1975 JAN 3.5	0.42	311.7	-6.96	54.9	0.0	1.36	42586.0	1975 JUN 22.5	0.44	292.6	-6.34	35.9	0.0	0.63
42418.0	1975 JAN 5.5	0.41	318.7	-7.00	61.8	0.0	1.34	42588.0	1975 JUN 24.5	0.44	298.8	-6.62	42.1	0.0	0.66
42420.0	1975 JAN 7.5	0.40	326.0	-6.93	69.1	0.0	1.31	42590.0	1975 JUN 26.5	0.43	305.2	-6.84	48.4	0.0	0.69
42422.0	1975 JAN 9.5	0.39	333.8	-6.74	76.9	0.0	1.29	42592.0	1975 JUN 28.5	0.42	311.9	-6.97	55.1	0.0	0.72
42424.0	1975 JAN 11.5	0.38	342.0	-6.40	85.0	0.0	1.25	42594.0	1975 JUL 0.5	0.41	318.9	-7.00	62.1	0.0	0.76
42426.0	1975 JAN 13.5	0.37	350.8	-5.89	93.7	0.0	1.22	42596.0	1975 JUL 2.5	0.40	326.3	-6.93	69.4	0.0	0.80
42428.0	1975 JAN 15.5	0.35	0.0	-5.20	103.0	0.0	1.18	42598.0	1975 JUL 4.5	0.39	334.0	-6.73	77.1	0.0	0.84
42430.0	1975 JAN 17.5	0.34	9.9	-4.32	112.9	0.0	1.13	42600.0	1975 JUL 6.5	0.38	342.3	-6.38	85.3	0.0	0.88
42432.0	1975 JAN 19.5	0.33	20.4	-3.25	123.4	0.0	1.08	42602.0	1975 JUL 8.5	0.37	351.0	-5.87	94.0	0.0	0.93
42434.0	1975 JAN 21.5	0.32	31.4	-1.99	134.5	0.0	1.03	42604.0	1975 JUL 10.5	0.35	0.3	-5.18	103.3	0.0	0.97
42436.0	1975 JAN 23.5	0.32	43.1	-0.59	146.2	0.0	0.98	42606.0	1975 JUL 12.5	0.34	10.2	-4.29	113.2	0.0	1.02
42438.0	1975 JAN 25.5	0.31	55.2	0.89	158.4	0.0	0.92	42608.0	1975 JUL 14.5	0.33	20.7	-3.21	123.7	0.0	1.07
42440.0	1975 JAN 27.5	0.31	67.6	2.38	170.9	0.0	0.87	42610.0	1975 JUL 16.5	0.32	31.8	-1.95	134.8	0.0	1.11
42442.0	1975 JAN 29.5	0.31	80.2	3.76	183.6	0.0	0.82	42612.0	1975 JUL 18.5	0.32	43.4	-0.54	146.6	0.0	1 16
42444.0	1975 FEB 0.5	0.31	92.8	4.96	196.2	0.0	0.77	42614.0	1975 JUL 20.5	0.31	55.5	0.94	158.8	0.0	1.20
42446.0	1975 FEB 2.5	0.31	105.2	5.91	208.6	0.0	0.72	42616.0	1975 JUL 22.5	0.31	68.0	2.42	171.3	0.0	1.23
42448.0	1975 FEB 4.5	0.32	117.2	6.56	220.5	0.0	0.69	42618.0	1975 JUL 24.5	0.31	80.6	3.80	184.0	0.0	1.27

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	DIST
42670.0	1975 JUL 26.5	0.31	93.2	5.00	196.6	0.0	1.29
42672.0	1975 JUL 28.5	0.31	105.6	5.93	208.9	0.0	1.32
42674.0	1975 JUL 30.5	0.32	117.6	6.57	220.9	0.0	1.33
42676.0	1975 AUG 1.5	0.33	129.0	6.92	232.2	0.0	1.34
42678.0	1975 AUG 3.5	0.34	139.8	7.00	243.0	0.0	1.35
42680.0	1975 AUG 5.5	0.35	150.0	6.85	253.1	0.0	1.35
42682.0	1975 AUG 7.5	0.36	159.6	6.51	262.6	0.0	1.35
42684.0	1975 AUG 9.5	0.37	168.6	6.03	271.5	0.0	1.34
42686.0	1975 AUG 11.5	0.38	177.0	5.45	279.9	0.0	1.33
42688.0	1975 AUG 13.5	0.40	184.8	4.79	287.8	0.0	1.32
42690.0	1975 AUG 15.5	0.41	192.3	4.09	295.3	0.0	1.31
42692.0	1975 AUG 17.5	0.42	199.4	3.35	302.4	0.0	1.29
42694.0	1975 AUG 19.5	0.43	206.1	2.61	309.1	0.0	1.28
42696.0	1975 AUG 21.5	0.43	212.5	1.86	315.6	0.0	1.26
42698.0	1975 AUG 23.5	0.44	218.7	1.12	321.8	0.0	1.24
42700.0	1975 AUG 25.5	0.45	224.7	0.38	327.9	0.0	1.22
42702.0	1975 AUG 27.5	0.45	230.6	-0.33	333.8	0.0	1.20
42704.0	1975 AUG 29.5	0.46	236.3	-1.03	339.5	0.0	1.17
42706.0	1975 SEP 0.5	0.46	241.9	-1.71	345.2	0.0	1.15
42708.0	1975 SEP 2.5	0.47	247.4	-2.36	350.7	0.0	1.12
42710.0	1975 SEP 4.5	0.47	252.9	-2.98	356.3	0.0	1.10
42712.0	1975 SEP 6.5	0.47	258.4	-3.57	1.8	0.0	1.07
42714.0	1975 SEP 8.5	0.47	263.9	-4.14	7.3	0.0	1.04
42716.0	1975 SEP 10.5	0.46	269.5	-4.66	12.8	0.0	1.01
42718.0	1975 SEP 12.5	0.46	275.1	-5.15	18.5	0.0	0.98
42720.0	1975 SEP 14.5	0.46	280.8	-5.60	24.2	0.0	0.95
42722.0	1975 SEP 16.5	0.45	286.6	-6.00	30.0	0.0	0.92
42724.0	1975 SEP 18.5	0.44	292.7	-6.34	36.0	0.0	0.89
42726.0	1975 SEP 20.5	0.44	298.9	-6.63	42.2	0.0	0.86
42728.0	1975 SEP 22.5	0.43	305.3	-6.84	48.5	0.0	0.83
42730.0	1975 SEP 24.5	0.42	312.0	-6.97	55.2	0.0	0.79
42732.0	1975 SEP 26.5	0.41	319.0	-7.00	62.2	0.0	0.76
42734.0	1975 SEP 28.5	0.40	326.4	-6.93	69.5	0.0	0.73
42736.0	1975 OCT 0.5	0.39	334.2	-6.72	77.2	0.0	0.71
42738.0	1975 OCT 2.5	0.38	342.4	-6.38	85.4	0.0	0.69
42740.0	1975 OCT 4.5	0.37	351.2	-5.86	94.1	0.0	0.67
42742.0	1975 OCT 6.5	0.35	0.5	-5.17	103.4	0.0	0.66
42744.0	1975 OCT 8.5	0.34	10.4	-4.28	113.3	0.0	0.66
42746.0	1975 OCT 10.5	0.33	20.9	-3.19	123.9	0.0	0.67
42748.0	1975 OCT 12.5	0.32	32.0	-1.93	135.0	0.0	0.69
42750.0	1975 OCT 14.5	0.32	43.6	-0.52	146.7	0.0	0.72
42752.0	1975 OCT 16.5	0.31	55.7	0.96	159.0	0.0	0.76
42754.0	1975 OCT 18.5	0.31	68.2	2.44	171.5	0.0	0.80
42756.0	1975 OCT 20.5	0.31	80.8	3.82	184.2	0.0	0.86
42758.0	1975 OCT 22.5	0.31	93.4	5.01	196.8	0.0	0.91
42760.0	1975 OCT 24.5	0.31	105.8	5.94	209.1	0.0	0.97
42762.0	1975 OCT 26.5	0.32	117.7	6.58	221.0	0.0	1.02
42764.0	1975 OCT 28.5	0.33	129.2	6.92	232.4	0.0	1.07
42766.0	1975 OCT 30.5	0.34	140.0	7.00	243.2	0.0	1.12
42768.0	1975 NOV 1.5	0.35	150.2	6.84	253.3	0.0	1.17
42770.0	1975 NOV 3.5	0.36	159.7	6.60	262.8	0.0	1.21
42772.0	1975 NOV 5.5	0.37	168.7	6.02	271.7	0.0	1.25
42774.0	1975 NOV 7.5	0.38	177.1	5.44	280.0	0.0	1.28
42776.0	1975 NOV 9.5	0.40	185.0	4.78	287.9	0.0	1.31
42778.0	1975 NOV 11.5	0.41	192.4	4.08	295.4	0.0	1.34
42780.0	1975 NOV 13.5	0.42	199.5	3.34	302.5	0.0	1.36
42782.0	1975 NOV 15.5	0.43	206.2	2.60	309.2	0.0	1.38
42784.0	1975 NOV 17.5	0.43	212.6	1.85	315.7	0.0	1.40
42786.0	1975 NOV 19.5	0.44	218.8	1.10	321.9	0.0	1.42
42788.0	1975 NOV 21.5	0.45	224.8	0.37	328.0	0.0	1.43
42790.0	1975 NOV 23.5	0.45	230.7	-0.34	333.8	0.0	1.44
42792.0	1975 NOV 25.5	0.46	236.4	-1.04	339.6	0.0	1.44
42794.0	1975 NOV 27.5	0.46	242.0	-1.72	345.2	0.0	1.45
42796.0	1975 NOV 29.5	0.47	247.5	-2.37	350.8	0.0	1.45
42798.0	1975 DEC 1.5	0.47	253.0	-2.99	356.3	0.0	1.45
42800.0	1975 DEC 3.5	0.47	258.5	-3.58	1.9	0.0	1.45
42802.0	1975 DEC 5.5	0.47	264.0	-4.15	7.4	0.0	1.44
42804.0	1975 DEC 7.5	0.46	269.6	-4.67	12.9	0.0	1.44
42806.0	1975 DEC 9.5	0.46	275.2	-5.16	18.6	0.0	1.43
42808.0	1975 DEC 11.5	0.46	280.9	-5.61	24.3	0.0	1.42
42810.0	1975 DEC 13.5	0.45	286.7	-6.00	30.1	0.0	1.40
42812.0	1975 DEC 15.5	0.44	292.7	-6.35	36.1	0.0	1.39
42814.0	1975 DEC 17.5	0.44	299.0	-6.63	42.2	0.0	1.37
42816.0	1975 DEC 19.5	0.43	305.4	-6.84	48.6	0.0	1.34
42818.0	1975 DEC 21.5	0.42	312.1	-6.97	55.3	0.0	1.32
42820.0	1975 DEC 23.5	0.41	319.1	-7.00	62.3	0.0	1.29
42822.0	1975 DEC 25.5	0.40	326.5	-6.93	69.6	0.0	1.26
42824.0	1975 DEC 27.5	0.39	334.3	-6.72	77.3	0.0	1.23
42826.0	1975 DEC 29.5	0.38	342.5	-6.37	85.6	0.0	1.19
42828.0	1976 JAN 0.5	0.37	351.3	-5.85	94.3	0.0	1.15
42830.0	1976 JAN 2.5	0.35	0.6	-5.15	103.6	0.0	1.10
42832.0	1976 JAN 4.5	0.34	10.5	-4.26	113.5	0.0	1.06
42834.0	1976 JAN 6.5	0.33	21.0	-3.17	124.0	0.0	1.00
42836.0	1976 JAN 8.5	0.32	32.1	-1.91	135.2	0.0	0.95
42838.0	1976 JAN 10.5	0.32	43.8	-0.50	146.9	0.0	0.90
42840.0	1976 JAN 12.5	0.31	55.9	0.99	159.1	0.0	0.85
42842.0	1976 JAN 14.5	0.31	68.4	2.47	171.7	0.0	0.80
42844.0	1976 JAN 16.5	0.31	81.0	3.84	184.4	0.0	0.75
42846.0	1976 JAN 18.5	0.31	93.6	5.03	197.0	0.0	0.71
42848.0	1976 JAN 20.5	0.31	106.0	5.95	209.3	0.0	0.68
42850.0	1976 JAN 22.5	0.32	117.9	6.59	221.2	0.0	0.67
42852.0	1976 JAN 24.5	0.33	129.3	6.93	232.6	0.0	0.66
42854.0	1976 JAN 26.5	0.34	140.2	7.00	243.3	0.0	0.67
42856.0	1976 JAN 28.5	0.35	150.3	6.84	253.4	0.0	0.68
42858.0	1976 JAN 30.5	0.36	159.9	6.50	262.9	0.0	0.70
42860.0	1976 FEB 1.5	0.37	168.8	6.01	271.8	0.0	0.73
42862.0	1976 FEB 3.5	0.38	177.2	5.43	280.2	0.0	0.76
42864.0	1976 FEB 5.5	0.40	185.1	4.77	288.0	0.0	0.79
42866.0	1976 FEB 7.5	0.41	192.5	4.06	295.5	0.0	0.82
42868.0	1976 FEB 9.5	0.42	199.6	3.33	302.6	0.0	0.86
42870.0	1976 FEB 11.5	0.43	206.3	2.58	309.3	0.0	0.89
42872.0	1976 FEB 13.5	0.43	212.7	1.84	315.8	0.0	0.93
42874.0	1976 FEB 15.5	0.44	218.9	1.09	322.0	0.0	0.96
42876.0	1976 FEB 17.5	0.45	224.9	0.36	328.1	0.0	0.99
42878.0	1976 FEB 19.5	0.45	230.8	-0.36	333.9	0.0	1.02
42880.0	1976 FEB 21.5	0.46	236.5	-1.05	339.7	0.0	1.05
42882.0	1976 FEB 23.5	0.46	242.1	-1.73	345.3	0.0	1.08
42884.0	1976 FEB 25.5	0.47	247.6	-2.38	350.9	0.0	1.11
42886.0	1976 FEB 27.5	0.47	253.1	-3.00	356.4	0.0	1.13
42888.0	1976 MAR 0.5	0.47	258.6	-3.59	1.9	0.0	1.16
42840.0	1976 MAR 2.5	0.47	264.1	-4.15	7.5	0.0	1.18
42842.0	1976 MAR 4.5	0.46	269.6	-4.68	13.0	0.0	1.20
42844.0	1976 MAR 6.5	0.46	275.3	-5.17	18.6	0.0	1.22
42846.0	1976 MAR 8.5	0.46	281.0	-5.61	24.4	0.0	1.24
42848.0	1976 MAR 10.5	0.45	286.8	-6.01	30.2	0.0	1.26
42850.0	1976 MAR 12.5	0.44	292.8	-6.35	36.2	0.0	1.28
42852.0	1976 MAR 14.5	0.44	299.0	-6.63	42.3	0.0	1.30
42854.0	1976 MAR 16.5	0.43	305.5	-6.84	48.7	0.0	1.31
42856.0	1976 MAR 18.5	0.42	312.2	-6.97	55.4	0.0	1.32
42858.0	1976 MAR 20.5	0.41	319.2	-7.00	62.4	0.0	1.33
42860.0	1976 MAR 22.5	0.40	326.6	-6.92	69.7	0.0	1.34
42862.0	1976 MAR 24.5	0.39	334.4	-6.72	77.5	0.0	1.35
42864.0	1976 MAR 26.5	0.38	342.7	-6.36	85.7	0.0	1.35
42866.0	1976 MAR 28.5	0.36	351.4	-5.84	94.4	0.0	1.35
42868.0	1976 MAR 30.5	0.35	0.8	-5.14	103.7	0.0	1.35
42870.0	1976 APR 1.5	0.34	10.7	-4.25	113.6	0.0	1.34
42872.0	1976 APR 3.5	0.33	21.2	-3.16	124.2	0.0	1.33
42874.0	1976 APR 5.5	0.32	32.3	-1.89	135.4	0.0	1.31
42876.0	1976 APR 7.5	0.32	44.0	-0.48	147.1	0.0	1.29
42878.0	1976 APR 9.5	0.31	56.1	1.01	159.3	0.0	1.27
42880.0	1976 APR 11.5	0.31	68.6	2.49	171.9	0.0	1.23
42882.0	1976 APR 13.5	0.31	81.2	3.86	184.6	0.0	1.20
42884.0	1976 APR 15.5	0.31	93.8	5.05	197.2	0.0	1.15
42886.0	1976 APR 17.5	0.31	106.2	5.97	209.5	0.0	1.11
42888.0	1976 APR 19.5	0.32	118.1	6.60	221.4	0.0	1.06
42890.0	1976 APR 21.5	0.33	129.5	6.93	232.7	0.0	1.01
42892.0	1976 APR 23.5	0.34	140.3	7.00	243.5	0.0	0.96
42894.0	1976 APR 25.5	0.35	150.5	6.84	253.6	0.0	0.91
42896.0	1976 APR 27.5	0.36	160.0	6.49	263.0	0.0	0.87
42898.0	1976 APR 29.5	0.37	169.0	6.01	271.9	0.0	0.82
42900.0	1976 MAY 1.5	0.38	177.3	5.42	280.3	0.0	0.78
42902.0	1976 MAY 3.5	0.40	185.2	4.76	288.2	0.0	0.74
42904.0	1976 MAY 5.5	0.41	192.6	4.05	295.6	0.0	0.70
42906.0	1976 MAY 7.5	0.42	199.7	3.32	302.7	0.0	0.67
42908.0	1976 MAY 9.5	0.43	206.4	2.57	309.4	0.0	0.64
42910.0	1976 MAY 11.5	0.43	212.8	1.82	315.9	0.0	0.61
42912.0	1976 MAY 13.5	0.44	219.0	1.08	322.1	0.0	0.59
42914.0	1976 MAY 15.5	0.45	225.0	0.35	328.2	0.0	0.57
42916.0	1976 MAY 17.5	0.45	230.8	-0.37	334.0	0.0	0.56
42918.0	1976 MAY 19.5	0.46	236.5	-1.06	339.8	0.0	0.55
42920.0	1976 MAY 21.5	0.46	242.1	-1.74	345.4	0.0	0.55
42922.0	1976 MAY 23.5	0.47	247.7	-2.39	351.0	0.0	0.55
42924.0	1976 MAY 25.5	0.47	253.2	-3.01	356.5	0.0	0.56
42926.0	1976 MAY 27.5	0.47	258.7	-3.60	2.0	0.0	0.57
42928.0	1976 MAY 29.5	0.47	264.2	-4.16	7.5	0.0	0.58
42930.0	1976 JUN 0.5	0.46	269.7	-4.69	13.1	0.0	0.60
42932.0	1976 JUN 2.5	0.46	275.3	-5.17	18.7	0.0	0.62
42934.0	1976 JUN 4.5	0.46	281.1	-5.62	24.4	0.0	0.65
42936.0	1976 JUN 6.5	0.45	286.9	-6.02	30.3	0.0	0.67
42938.0	1976 JUN 8.5	0.44	292.9	-6.36	36.3	0.0	0.70
42940.0	1976 JUN 10.5	0.44	299.1	-6.64	42.4	0.0	0.74
42942.0	1976 JUN 12.5	0.43	305.6	-6.85	48.8	0.0	0.77
42944.0	1976 JUN 14.5	0.42	312.3	-6.97	55.5	0.0	0.81
42946.0	1976 JUN 16.5	0.41	319.3	-7.00	62.5	0.0	0.85
42948.0	1976 JUN 18.5	0.40	326.7	-6.92	69.8	0.0	0.89
42950.0	1976 JUN 20.5	0.39	334.5	-6.71	77.6	0.0	0.93
42952.0	1976 JUN 22.5	0.38	342.8	-6.36	85.8	0.0	0.97
42954.0	1976 JUN 24.5	0.36	351.6	-5.83	94.6	0.0	1.01
42956.0	1976 JUN 26.5	0.35	0.9	-5.13	103.9	0.0	1.05
42958.0	1976 JUN 28.5	0.34	10.8	-4.23	113.8	0.0	1.10

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

DATE		R	LONG	LAT	RAS	DECS	COIST
42960.0	1976 JUL 0.5	0.33	21.4	-3.14	134.4	0.0	1.14
42962.0	1976 JUL 2.5	0.32	32.5	-1.87	135.5	0.0	1.18
42964.0	1976 JUL 4.5	0.32	44.2	-0.45	147.3	0.0	1.21
42966.0	1976 JUL 6.5	0.31	56.3	1.03	159.5	0.0	1.25
42968.0	1976 JUL 8.5	0.31	68.8	2.51	172.1	0.0	1.27
42970.0	1976 JUL 10.5	0.31	81.4	3.88	184.8	0.0	1.30
42972.0	1976 JUL 12.5	0.31	94.0	5.06	197.4	0.0	1.32
42974.0	1976 JUL 14.5	0.31	106.3	5.98	209.7	0.0	1.33
42976.0	1976 JUL 16.5	0.32	118.3	6.60	221.6	0.0	1.34
42978.0	1976 JUL 18.5	0.33	129.7	6.93	232.9	0.0	1.34
42980.0	1976 JUL 20.5	0.34	140.5	7.00	243.6	0.0	1.33
42982.0	1976 JUL 22.5	0.35	150.6	6.83	253.7	0.0	1.33
42984.0	1976 JUL 24.5	0.36	160.2	6.48	263.2	0.0	1.32
42986.0	1976 JUL 26.5	0.37	169.1	6.00	272.1	0.0	1.30
42988.0	1976 JUL 28.5	0.39	177.5	5.41	280.4	0.0	1.29
42990.0	1976 JUL 30.5	0.40	185.3	4.75	288.2	0.0	1.27
42992.0	1976 AUG 1.5	0.41	192.7	4.04	295.7	0.0	1.25
42994.0	1976 AUG 3.5	0.42	199.8	3.31	302.8	0.0	1.23
42996.0	1976 AUG 5.5	0.43	206.5	2.56	309.5	0.0	1.21
42998.0	1976 AUG 7.5	0.44	212.9	1.81	316.0	0.0	1.18
43000.0	1976 AUG 9.5	0.44	219.1	1.07	322.2	0.0	1.16
43002.0	1976 AUG 11.5	0.45	225.1	0.34	328.2	0.0	1.13
43004.0	1976 AUG 13.5	0.45	230.9	-0.38	334.1	0.0	1.11
43006.0	1976 AUG 15.5	0.46	236.6	-1.07	339.9	0.0	1.08
43008.0	1976 AUG 17.5	0.46	242.2	-1.75	345.5	0.0	1.05
43010.0	1976 AUG 19.5	0.47	247.8	-2.40	351.1	0.0	1.03
43012.0	1976 AUG 21.5	0.47	253.3	-3.02	356.6	0.0	1.00
43014.0	1976 AUG 23.5	0.47	258.8	-3.61	2.1	0.0	0.97
43016.0	1976 AUG 25.5	0.47	264.3	-4.17	7.6	0.0	0.94
43018.0	1976 AUG 27.5	0.46	269.8	-4.70	13.2	0.0	0.91
43020.0	1976 AUG 29.5	0.46	275.4	-5.18	18.8	0.0	0.88
43022.0	1976 SEP 0.5	0.46	281.2	-5.63	24.5	0.0	0.85
43024.0	1976 SEP 2.5	0.45	287.0	-6.02	30.4	0.0	0.82
43026.0	1976 SEP 4.5	0.44	293.0	-6.36	36.4	0.0	0.79
43028.0	1976 SEP 6.5	0.44	299.2	-6.64	42.5	0.0	0.76
43030.0	1976 SEP 8.5	0.43	305.7	-6.85	48.9	0.0	0.74
43032.0	1976 SEP 10.5	0.42	312.4	-6.97	55.6	0.0	0.71
43034.0	1976 SEP 12.5	0.41	319.5	-7.00	62.6	0.0	0.69
43036.0	1976 SEP 14.5	0.40	326.9	-6.92	70.0	0.0	0.67
43038.0	1976 SEP 16.5	0.39	334.7	-6.71	77.7	0.0	0.65
43040.0	1976 SEP 18.5	0.38	342.9	-6.35	85.9	0.0	0.65
43042.0	1976 SEP 20.5	0.36	351.7	-5.82	94.7	0.0	0.65
43044.0	1976 SEP 22.5	0.35	1.1	-5.12	104.0	0.0	0.65
43046.0	1976 SEP 24.5	0.34	11.0	-4.22	114.0	0.0	0.67
43048.0	1976 SEP 26.5	0.33	21.5	-3.12	124.5	0.0	0.70
43050.0	1976 SEP 28.5	0.32	32.7	-1.84	135.7	0.0	0.73
43052.0	1976 OCT 0.5	0.32	44.3	-0.43	147.5	0.0	0.77
43054.0	1976 OCT 2.5	0.31	56.5	1.06	159.7	0.0	0.82
43056.0	1976 OCT 4.5	0.31	69.0	2.53	172.3	0.0	0.88
43058.0	1976 OCT 6.5	0.31	81.6	3.90	185.0	0.0	0.93
43060.0	1976 OCT 8.5	0.31	94.2	5.08	197.6	0.0	0.99
43062.0	1976 OCT 10.5	0.31	106.5	5.99	209.9	0.0	1.04
43064.0	1976 OCT 12.5	0.32	118.5	6.61	221.8	0.0	1.10
43066.0	1976 OCT 14.5	0.33	129.9	6.94	233.1	0.0	1.15
43068.0	1976 OCT 16.5	0.34	140.6	7.00	243.8	0.0	1.19
43070.0	1976 OCT 18.5	0.35	150.8	6.83	253.9	0.0	1.23
43072.0	1976 OCT 20.5	0.36	160.3	6.48	263.3	0.0	1.27
43074.0	1976 OCT 22.5	0.37	169.2	5.99	272.2	0.0	1.30
43076.0	1976 OCT 24.5	0.39	177.6	5.40	280.5	0.0	1.33
43078.0	1976 OCT 26.5	0.40	185.4	4.74	288.4	0.0	1.36
43080.0	1976 OCT 28.5	0.41	192.9	4.03	295.8	0.0	1.38
43082.0	1976 OCT 30.5	0.42	199.9	3.30	302.9	0.0	1.40
43084.0	1976 NOV 1.5	0.43	206.6	2.55	309.6	0.0	1.41
43086.0	1976 NOV 3.5	0.44	213.0	1.80	316.1	0.0	1.42
43088.0	1976 NOV 5.5	0.44	219.2	1.06	322.3	0.0	1.43
43090.0	1976 NOV 7.5	0.45	225.2	0.33	328.3	0.0	1.44
43092.0	1976 NOV 9.5	0.45	231.0	-0.39	334.2	0.0	1.44
43094.0	1976 NOV 11.5	0.46	236.7	-1.08	339.9	0.0	1.45
43096.0	1976 NOV 13.5	0.46	242.3	-1.76	345.6	0.0	1.45
43098.0	1976 NOV 15.5	0.47	247.9	-2.41	351.2	0.0	1.44
43100.0	1976 NOV 17.5	0.47	253.4	-3.03	356.7	0.0	1.44
43102.0	1976 NOV 19.5	0.47	258.8	-3.62	2.2	0.0	1.43
43104.0	1976 NOV 21.5	0.47	264.3	-4.18	7.7	0.0	1.42
43106.0	1976 NOV 23.5	0.46	269.9	-4.70	13.3	0.0	1.41
43108.0	1976 NOV 25.5	0.46	275.5	-5.19	18.9	0.0	1.40
43110.0	1976 NOV 27.5	0.46	281.2	-5.63	24.6	0.0	1.38
43112.0	1976 NOV 29.5	0.45	287.1	-6.03	30.5	0.0	1.36
43114.0	1976 DEC 1.5	0.44	293.1	-6.37	36.5	0.0	1.34
43116.0	1976 DEC 3.5	0.44	299.3	-6.64	42.6	0.0	1.32
43118.0	1976 DEC 5.5	0.43	305.8	-6.85	49.0	0.0	1.29
43120.0	1976 DEC 7.5	0.42	312.5	-6.97	55.7	0.0	1.26
43122.0	1976 DEC 9.5	0.41	319.6	-7.00	62.7	0.0	1.23
43124.0	1976 DEC 11.5	0.40	327.0	-6.92	70.1	0.0	1.19
43126.0	1976 DEC 13.5	0.39	334.8	-6.70	77.8	0.0	1.16
43128.0	1976 DEC 15.5	0.38	343.1	-6.34	86.1	0.0	1.11
43130.0	1976 DEC 17.5	0.36	351.9	-5.82	94.8	0.0	1.07
43132.0	1976 DEC 19.5	0.35	1.2	-5.10	104.2	0.0	1.02
43134.0	1976 DEC 21.5	0.34	11.1	-4.20	114.1	0.0	0.97
43136.0	1976 DEC 23.5	0.33	21.7	-3.10	124.7	0.0	0.92
43138.0	1976 DEC 25.5	0.32	32.8	-1.82	135.9	0.0	0.87
43140.0	1976 DEC 27.5	0.32	44.5	-0.41	147.7	0.0	0.82
43142.0	1976 DEC 29.5	0.31	56.7	1.08	159.9	0.0	0.78
43144.0	1977 JAN 0.5	0.31	69.2	2.56	172.5	0.0	0.74
43146.0	1977 JAN 2.5	0.31	81.8	3.92	185.2	0.0	0.70
43148.0	1977 JAN 4.5	0.31	94.4	5.09	197.8	0.0	0.68
43150.0	1977 JAN 6.5	0.31	106.7	6.00	210.1	0.0	0.67
43152.0	1977 JAN 8.5	0.32	118.6	6.62	221.9	0.0	0.67
43154.0	1977 JAN 10.5	0.33	130.0	6.94	233.3	0.0	0.69
43156.0	1977 JAN 12.5	0.34	140.8	6.99	244.0	0.0	0.71
43158.0	1977 JAN 14.5	0.35	150.9	6.82	254.0	0.0	0.74
43160.0	1977 JAN 16.5	0.36	160.4	6.47	263.5	0.0	0.77
43162.0	1977 JAN 18.5	0.37	169.3	5.98	272.3	0.0	0.81
43164.0	1977 JAN 20.5	0.39	177.7	5.39	280.7	0.0	0.84
43166.0	1977 JAN 22.5	0.40	185.6	4.73	288.5	0.0	0.88
43168.0	1977 JAN 24.5	0.41	193.0	4.02	295.9	0.0	0.92
43170.0	1977 JAN 26.5	0.42	200.0	3.29	303.0	0.0	0.96
43172.0	1977 JAN 28.5	0.43	206.7	2.54	309.7	0.0	0.99
43174.0	1977 JAN 30.5	0.44	213.1	1.79	316.2	0.0	1.03
43176.0	1977 FEB 1.5	0.44	219.3	1.05	322.4	0.0	1.06
43178.0	1977 FEB 3.5	0.45	225.3	0.32	328.4	0.0	1.09
43180.0	1977 FEB 5.5	0.46	231.1	-0.40	334.3	0.0	1.12
43182.0	1977 FEB 7.5	0.46	236.8	-1.09	340.0	0.0	1.15
43184.0	1977 FEB 9.5	0.46	242.4	-1.77	345.7	0.0	1.17
43186.0	1977 FEB 11.5	0.47	247.9	-2.42	351.2	0.0	1.20
43188.0	1977 FEB 13.5	0.47	253.4	-3.04	356.8	-0.0	1.22
43190.0	1977 FEB 15.5	0.47	258.9	-3.63	2.3	0.0	1.24
43192.0	1977 FEB 17.5	0.47	264.4	-4.19	7.8	0.0	1.26
43194.0	1977 FEB 19.5	0.46	270.0	-4.71	13.4	0.0	1.28
43196.0	1977 FEB 21.5	0.46	275.6	-5.20	19.0	0.0	1.30
43198.0	1977 FEB 23.5	0.46	281.3	-5.64	24.7	0.0	1.31
43200.0	1977 FEB 25.5	0.45	287.2	-6.03	30.5	0.0	1.33
43202.0	1977 FEB 27.5	0.44	293.2	-6.37	36.5	0.0	1.34
43204.0	1977 MAR 1.5	0.44	299.4	-6.65	42.7	0.0	1.35
43206.0	1977 MAR 3.5	0.43	305.9	-6.85	49.1	0.0	1.36
43208.0	1977 MAR 5.5	0.42	312.6	-6.99	55.8	0.0	1.36
43210.0	1977 MAR 7.5	0.41	319.7	-7.00	62.8	0.0	1.37
43212.0	1977 MAR 9.5	0.40	327.1	-6.91	70.2	0.0	1.37
43214.0	1977 MAR 11.5	0.39	334.9	-6.70	78.0	0.0	1.37
43216.0	1977 MAR 13.5	0.38	343.2	-6.34	86.2	0.0	1.36
43218.0	1977 MAR 15.5	0.36	352.0	-5.81	95.0	0.0	1.36
43220.0	1977 MAR 17.5	0.35	1.4	-5.09	104.3	0.0	1.35
43222.0	1977 MAR 19.5	0.34	11.3	-4.18	114.3	0.0	1.33
43224.0	1977 MAR 21.5	0.33	21.9	-3.08	124.9	0.0	1.31
43226.0	1977 MAR 23.5	0.32	33.0	-1.80	136.1	0.0	1.29
43228.0	1977 MAR 25.5	0.32	44.7	-0.39	147.9	0.0	1.26
43230.0	1977 MAR 27.5	0.31	56.9	1.10	160.1	0.0	1.22
43232.0	1977 MAR 29.5	0.31	69.4	2.58	172.7	0.0	1.18
43234.0	1977 APR 0.5	0.31	82.0	3.94	185.3	0.0	1.13
43236.0	1977 APR 2.5	0.31	94.6	5.11	197.9	0.0	1.09
43238.0	1977 APR 4.5	0.31	106.9	6.01	210.3	0.0	1.04
43240.0	1977 APR 6.5	0.32	118.8	6.62	222.1	0.0	0.98
43242.0	1977 APR 8.5	0.33	130.2	6.94	233.4	0.0	0.93
43244.0	1977 APR 10.5	0.34	141.0	6.99	244.1	0.0	0.88
43246.0	1977 APR 12.5	0.35	151.1	6.82	254.2	0.0	0.83
43248.0	1977 APR 14.5	0.36	160.6	6.46	263.6	0.0	0.78
43250.0	1977 APR 16.5	0.37	169.5	5.97	272.5	0.0	0.74
43252.0	1977 APR 18.5	0.39	177.8	5.39	280.8	0.0	0.70
43254.0	1977 APR 20.5	0.40	185.7	4.72	288.6	0.0	0.67
43256.0	1977 APR 22.5	0.41	193.1	4.01	296.0	0.0	0.64
43258.0	1977 APR 24.5	0.42	200.1	3.27	303.1	0.0	0.61
43260.0	1977 APR 26.5	0.43	206.8	2.53	309.9	0.0	0.59
43262.0	1977 APR 28.5	0.44	213.2	1.78	316.3	0.0	0.57
43264.0	1977 MAY 0.5	0.44	219.4	1.04	322.5	0.0	0.56
43266.0	1977 MAY 2.5	0.45	225.4	0.31	328.5	0.0	0.56
43268.0	1977 MAY 4.5	0.46	231.2	-0.41	334.4	0.0	0.56
43270.0	1977 MAY 6.5	0.46	236.9	-1.10	340.1	0.0	0.57
43272.0	1977 MAY 8.5	0.46	242.5	-1.78	345.9	0.0	0.58
43274.0	1977 MAY 10.5	0.47	248.0	-2.42	351.3	0.0	0.59
43276.0	1977 MAY 12.5	0.47	253.5	-3.05	356.9	0.0	0.61
43278.0	1977 MAY 14.5	0.47	259.0	-3.64	2.4	0.0	0.63
43280.0	1977 MAY 16.5	0.47	264.5	-4.20	7.9	0.0	0.65
43282.0	1977 MAY 18.5	0.46	270.1	-4.72	13.5	0.0	0.67
43284.0	1977 MAY 20.5	0.46	275.7	-5.20	19.1	0.0	0.70
43286.0	1977 MAY 22.5	0.46	281.4	-5.65	24.8	0.0	0.73
43288.0	1977 MAY 24.5	0.45	287.3	-6.04	30.6	0.0	0.76
43290.0	1977 MAY 26.5	0.44	293.3	-6.38	36.6	0.0	0.79
43292.0	1977 MAY 28.5	0.44	299.5	-6.65	42.8	0.0	0.83
43294.0	1977 MAY 30.5	0.43	306.0	-6.86	49.2	0.0	0.86
43296.0	1977 JUN 1.5	0.42	312.7	-6.98	55.9	0.0	0.90
43298.0	1977 JUN 3.5	0.41	319.8	-7.00	62.9	0.0	0.94

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	COIST
43300.0	1977 JUN 5.5	0.40	327.2	-6.91	70.3	0.0	0.97
43302.0	1977 JUN 7.5	0.39	335.0	-6.69	78.1	0.0	1.01
43304.0	1977 JUN 9.5	0.38	343.3	-6.33	86.3	0.0	1.05
43306.0	1977 JUN 11.5	0.36	352.1	-5.80	95.1	0.0	1.09
43308.0	1977 JUN 13.5	0.35	1.5	-5.08	104.5	0.0	1.13
43310.0	1977 JUN 15.5	0.34	11.5	-4.17	114.4	0.0	1.16
43312.0	1977 JUN 17.5	0.33	22.0	-3.06	125.0	0.0	1.20
43314.0	1977 JUN 19.5	0.32	33.2	-1.78	136.2	0.0	1.23
43316.0	1977 JUN 21.5	0.32	44.9	-0.36	148.0	0.0	1.26
43318.0	1977 JUN 23.5	0.31	57.1	1.13	160.3	0.0	1.28
43320.0	1977 JUN 25.5	0.31	69.5	2.60	172.9	0.0	1.30
43322.0	1977 JUN 27.5	0.31	82.2	3.96	185.5	0.0	1.32
43324.0	1977 JUN 29.5	0.31	94.8	5.13	198.1	0.0	1.33
43326.0	1977 JUL 1.5	0.31	107.1	6.03	210.4	0.0	1.33
43328.0	1977 JUL 3.5	0.32	119.0	6.63	222.3	0.0	1.33
43330.0	1977 JUL 5.5	0.33	130.4	6.94	233.6	0.0	1.32
43332.0	1977 JUL 7.5	0.34	141.1	6.99	244.3	0.0	1.31
43334.0	1977 JUL 9.5	0.35	151.2	6.82	254.3	0.0	1.29
43336.0	1977 JUL 11.5	0.36	160.7	6.46	263.7	0.0	1.27
43338.0	1977 JUL 13.5	0.37	169.6	5.96	272.6	0.0	1.25
43340.0	1977 JUL 15.5	0.39	177.9	5.37	280.9	0.0	1.23
43342.0	1977 JUL 17.5	0.40	185.8	4.71	288.7	0.0	1.20
43344.0	1977 JUL 19.5	0.41	193.2	4.00	296.2	0.0	1.18
43346.0	1977 JUL 21.5	0.42	200.2	3.26	303.2	0.0	1.15
43348.0	1977 JUL 23.5	0.43	206.9	2.52	309.9	0.0	1.12
43350.0	1977 JUL 25.5	0.44	213.3	1.77	316.4	0.0	1.10
43352.0	1977 JUL 27.5	0.44	219.5	1.02	322.6	0.0	1.07
43354.0	1977 JUL 29.5	0.45	225.5	0.29	328.6	0.0	1.04
43356.0	1977 AUG 0.5	0.46	231.3	-0.42	334.5	0.0	1.01
43358.0	1977 AUG 2.5	0.46	237.0	-1.12	340.2	0.0	0.98
43360.0	1977 AUG 4.5	0.46	242.6	-1.79	345.8	0.0	0.95
43362.0	1977 AUG 6.5	0.47	248.1	-2.43	351.4	0.0	0.92
43364.0	1977 AUG 8.5	0.47	253.6	-3.05	356.9	0.0	0.90
43366.0	1977 AUG 10.5	0.47	259.1	-3.65	2.5	0.0	0.87
43368.0	1977 AUG 12.5	0.47	264.6	-4.20	8.0	0.0	0.84
43370.0	1977 AUG 14.5	0.46	270.2	-4.73	13.5	0.0	0.81
43372.0	1977 AUG 16.5	0.46	275.8	-5.21	19.2	0.0	0.78
43374.0	1977 AUG 18.5	0.46	281.5	-5.65	24.9	0.0	0.75
43376.0	1977 AUG 20.5	0.45	287.4	-6.04	30.7	0.0	0.73
43378.0	1977 AUG 22.5	0.44	293.4	-6.38	36.7	0.0	0.70
43380.0	1977 AUG 24.5	0.44	299.6	-6.66	42.9	0.0	0.68
43382.0	1977 AUG 26.5	0.43	306.1	-6.86	49.3	0.0	0.66
43384.0	1977 AUG 28.5	0.42	312.8	-6.98	56.0	0.0	0.65
43386.0	1977 AUG 30.5	0.41	319.9	-7.00	63.0	0.0	0.63
43388.0	1977 SEP 1.5	0.40	327.3	-6.91	70.4	0.0	0.63
43390.0	1977 SEP 3.5	0.39	335.2	-6.69	78.2	0.0	0.63
43392.0	1977 SEP 5.5	0.38	343.5	-6.32	86.5	0.0	0.64
43394.0	1977 SEP 7.5	0.36	352.3	-5.79	95.2	0.0	0.65
43396.0	1977 SEP 9.5	0.35	1.7	-5.07	104.6	0.0	0.68
43398.0	1977 SEP 11.5	0.34	11.6	-4.15	114.6	0.0	0.71
43400.0	1977 SEP 13.5	0.33	22.2	-3.05	125.2	0.0	0.75
43402.0	1977 SEP 15.5	0.32	33.4	-1.76	136.4	0.0	0.79
43404.0	1977 SEP 17.5	0.32	45.1	-0.34	148.2	0.0	0.84
43406.0	1977 SEP 19.5	0.31	57.2	1.15	160.5	0.0	0.90
43408.0	1977 SEP 21.5	0.31	69.7	2.62	173.1	0.0	0.95
43410.0	1977 SEP 23.5	0.31	82.4	3.98	185.7	0.0	1.01
43412.0	1977 SEP 25.5	0.31	94.9	5.14	198.3	0.0	1.06
43414.0	1977 SEP 27.5	0.31	107.3	6.04	210.6	0.0	1.12
43416.0	1977 SEP 29.5	0.32	119.2	6.64	222.5	0.0	1.17
43418.0	1977 OCT 1.5	0.33	130.5	6.95	233.8	0.0	1.21
43420.0	1977 OCT 3.5	0.34	141.3	6.99	244.4	0.0	1.25
43422.0	1977 OCT 5.5	0.35	151.4	6.81	254.5	0.0	1.29
43424.0	1977 OCT 7.5	0.36	160.9	6.45	263.9	0.0	1.32
43426.0	1977 OCT 9.5	0.37	169.7	5.96	272.7	0.0	1.34
43428.0	1977 OCT 11.5	0.39	178.1	5.36	281.0	0.0	1.37
43430.0	1977 OCT 13.5	0.40	185.9	4.70	288.9	0.0	1.39
43432.0	1977 OCT 15.5	0.41	193.3	3.99	296.3	0.0	1.40
43434.0	1977 OCT 17.5	0.42	200.3	3.25	303.3	0.0	1.41
43436.0	1977 OCT 19.5	0.43	207.0	2.50	310.0	0.0	1.42
43438.0	1977 OCT 21.5	0.44	213.4	1.76	316.5	0.0	1.43
43440.0	1977 OCT 23.5	0.44	219.6	1.01	322.7	0.0	1.43
43442.0	1977 OCT 25.5	0.45	225.6	0.28	328.7	0.0	1.43
43444.0	1977 OCT 27.5	0.46	231.4	-0.43	334.6	0.0	1.43
43446.0	1977 OCT 29.5	0.46	237.1	-1.13	340.3	0.0	1.43
43448.0	1977 NOV 0.5	0.46	242.7	-1.80	345.9	0.0	1.43
43450.0	1977 NOV 2.5	0.47	248.2	-2.44	351.5	0.0	1.42
43452.0	1977 NOV 4.5	0.47	253.7	-3.06	357.0	0.0	1.41
43454.0	1977 NOV 6.5	0.47	259.2	-3.65	2.5	0.0	1.40
43456.0	1977 NOV 8.5	0.47	264.7	-4.21	8.1	0.0	1.38
43458.0	1977 NOV 10.5	0.46	270.2	-4.73	13.6	0.0	1.37
43460.0	1977 NOV 12.5	0.46	275.9	-5.22	19.3	0.0	1.35
43462.0	1977 NOV 14.5	0.46	281.6	-5.66	25.0	0.0	1.33
43464.0	1977 NOV 16.5	0.45	287.5	-6.05	30.8	0.0	1.31
43466.0	1977 NOV 18.5	0.44	293.5	-6.39	36.8	0.0	1.28
43468.0	1977 NOV 20.5	0.44	299.7	-6.66	43.0	0.0	1.25
43470.0	1977 NOV 22.5	0.43	306.2	-6.86	49.4	0.0	1.22
43472.0	1977 NOV 24.5	0.42	312.9	-6.98	56.1	0.0	1.19
43474.0	1977 NOV 26.5	0.41	320.0	-7.00	63.2	0.0	1.15
43476.0	1977 NOV 28.5	0.40	327.4	-6.91	70.5	0.0	1.12
43478.0	1977 DEC 0.5	0.39	335.2	-6.69	78.3	0.0	1.08
43480.0	1977 DEC 2.5	0.38	343.6	-6.31	86.6	0.0	1.03
43482.0	1977 DEC 4.5	0.36	352.4	-5.78	95.4	0.0	0.99
43484.0	1977 DEC 6.5	0.35	1.8	-5.05	104.8	0.0	0.94
43486.0	1977 DEC 8.5	0.34	11.8	-4.14	114.7	0.0	0.89
43488.0	1977 DEC 10.5	0.33	22.4	-3.03	125.4	0.0	0.84
43490.0	1977 DEC 12.5	0.32	33.5	-1.74	136.6	0.0	0.80
43492.0	1977 DEC 14.5	0.32	45.3	-0.32	148.4	0.0	0.76
43494.0	1977 DEC 16.5	0.31	57.4	1.17	160.7	0.0	0.72
43496.0	1977 DEC 18.5	0.31	69.9	2.64	173.2	0.0	0.69
43498.0	1977 DEC 20.5	0.31	82.6	4.00	185.9	0.0	0.68
43500.0	1977 DEC 22.5	0.31	95.1	5.16	198.5	0.0	0.68
43502.0	1977 DEC 24.5	0.32	107.5	6.05	210.8	0.0	0.69
43504.0	1977 DEC 26.5	0.32	119.4	6.65	222.7	0.0	0.71
43506.0	1977 DEC 28.5	0.33	130.7	6.95	233.9	0.0	0.74
43508.0	1977 DEC 30.5	0.34	141.5	6.99	244.6	0.0	0.77
43510.0	1978 JAN 1.5	0.35	151.5	6.81	254.6	0.0	0.81
43512.0	1978 JAN 3.5	0.36	161.0	6.44	264.0	0.0	0.85
43514.0	1978 JAN 5.5	0.37	169.9	5.95	272.9	0.0	0.90
43516.0	1978 JAN 7.5	0.39	178.2	5.35	281.2	0.0	0.94
43518.0	1978 JAN 9.5	0.40	186.0	4.68	289.0	0.0	0.98
43520.0	1978 JAN 11.5	0.41	193.4	3.98	296.4	0.0	1.02
43522.0	1978 JAN 13.5	0.42	200.4	3.24	303.4	0.0	1.05
43524.0	1978 JAN 15.5	0.43	207.1	2.49	310.1	0.0	1.09
43526.0	1978 JAN 17.5	0.44	213.5	1.74	316.6	0.0	1.12
43528.0	1978 JAN 19.5	0.44	219.7	1.00	322.8	0.0	1.15
43530.0	1978 JAN 21.5	0.45	225.6	0.27	328.8	0.0	1.18
43532.0	1978 JAN 23.5	0.46	231.5	-0.44	334.7	0.0	1.21
43534.0	1978 JAN 25.5	0.46	237.1	-1.14	340.4	0.0	1.23
43536.0	1978 JAN 27.5	0.46	242.7	-1.81	346.0	0.0	1.26
43538.0	1978 JAN 29.5	0.47	248.3	-2.45	351.6	0.0	1.28
43540.0	1978 FEB 0.5	0.47	253.8	-3.07	357.1	0.0	1.30
43542.0	1978 FEB 2.5	0.47	259.3	-3.66	2.6	0.0	1.32
43544.0	1978 FEB 4.5	0.47	264.8	-4.22	8.1	0.0	1.33
43546.0	1978 FEB 6.5	0.46	270.3	-4.74	13.7	0.0	1.35
43548.0	1978 FEB 8.5	0.46	276.0	-5.22	19.3	0.0	1.36
43550.0	1978 FEB 10.5	0.46	281.7	-5.66	25.1	0.0	1.37
43552.0	1978 FEB 12.5	0.45	287.6	-6.06	30.9	0.0	1.38
43554.0	1978 FEB 14.5	0.44	293.6	-6.39	36.9	0.0	1.38
43556.0	1978 FEB 16.5	0.44	299.8	-6.66	43.1	0.0	1.39
43558.0	1978 FEB 18.5	0.43	306.3	-6.86	49.5	0.0	1.39
43560.0	1978 FEB 20.5	0.42	313.0	-6.98	56.3	0.0	1.39
43562.0	1978 FEB 22.5	0.41	320.1	-7.00	63.3	0.0	1.39
43564.0	1978 FEB 24.5	0.40	327.6	-6.90	70.7	0.0	1.38
43566.0	1978 FEB 26.5	0.39	335.4	-6.68	78.5	0.0	1.37
43568.0	1978 MAR 0.5	0.38	343.7	-6.31	86.7	0.0	1.36
43570.0	1978 MAR 2.5	0.36	352.6	-5.77	95.5	0.0	1.35
43572.0	1978 MAR 4.5	0.35	2.0	-5.04	104.9	0.0	1.33
43574.0	1978 MAR 6.5	0.34	11.9	-4.12	114.9	0.0	1.31
43576.0	1978 MAR 8.5	0.33	22.5	-3.01	125.5	0.0	1.28
43578.0	1978 MAR 10.5	0.32	33.7	-1.72	136.8	0.0	1.24
43580.0	1978 MAR 12.5	0.32	45.4	-0.30	148.6	0.0	1.21
43582.0	1978 MAR 14.5	0.31	57.6	1.19	160.9	0.0	1.16
43584.0	1978 MAR 16.5	0.31	70.1	2.67	173.4	0.0	1.12
43586.0	1978 MAR 18.5	0.31	82.8	4.02	186.1	0.0	1.06
43588.0	1978 MAR 20.5	0.31	95.3	5.17	198.7	0.0	1.01
43590.0	1978 MAR 22.5	0.32	107.6	6.06	211.0	0.0	0.96
43592.0	1978 MAR 24.5	0.32	119.5	6.65	222.9	0.0	0.90
43594.0	1978 MAR 26.5	0.33	130.9	6.95	234.1	0.0	0.85
43596.0	1978 MAR 28.5	0.34	141.6	6.99	244.8	0.0	0.80
43598.0	1978 MAR 30.5	0.35	151.7	6.80	254.8	0.0	0.75
43600.0	1978 APR 1.5	0.36	161.2	6.44	264.2	0.0	0.71
43602.0	1978 APR 3.5	0.37	170.0	5.94	273.0	0.0	0.67
43604.0	1978 APR 5.5	0.39	178.3	5.34	281.3	0.0	0.64
43606.0	1978 APR 7.5	0.40	186.1	4.67	289.1	0.0	0.62
43608.0	1978 APR 9.5	0.41	193.5	3.96	296.5	0.0	0.60
43610.0	1978 APR 11.5	0.42	200.5	3.23	303.5	0.0	0.59
43612.0	1978 APR 13.5	0.43	207.2	2.48	310.2	0.0	0.58
43614.0	1978 APR 15.5	0.44	213.6	1.73	316.7	0.0	0.58
43616.0	1978 APR 17.5	0.44	219.8	0.99	322.9	0.0	0.58
43618.0	1978 APR 19.5	0.45	225.7	0.26	328.9	0.0	0.59
43620.0	1978 APR 21.5	0.46	231.5	-0.45	334.7	0.0	0.60
43622.0	1978 APR 23.5	0.46	237.2	-1.15	340.5	0.0	0.62
43624.0	1978 APR 25.5	0.46	242.8	-1.82	346.1	0.0	0.64
43626.0	1978 APR 27.5	0.47	248.4	-2.46	351.7	0.0	0.66
43628.0	1978 APR 29.5	0.47	253.9	-3.08	357.2	0.0	0.68
43630.0	1978 MAY 1.5	0.47	259.3	-3.67	2.7	0.0	0.71
43632.0	1978 MAY 3.5	0.47	264.9	-4.23	8.2	0.0	0.74
43634.0	1978 MAY 5.5	0.46	270.4	-4.75	13.8	0.0	0.77
43636.0	1978 MAY 7.5	0.46	276.0	-5.23	19.4	0.0	0.80
43638.0	1978 MAY 9.5	0.46	281.8	-5.67	25.2	0.0	0.83

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST
43640.0	1978 MAY 11.5	0.45	287.7	-6.06	31.0	0.0	0.86
43642.0	1978 MAY 13.5	0.44	293.7	-6.40	37.0	0.0	0.89
43644.0	1978 MAY 15.5	0.44	299.9	-6.67	43.2	0.0	0.92
43646.0	1978 MAY 17.5	0.43	306.4	-6.87	49.7	0.0	0.96
43648.0	1978 MAY 19.5	0.42	313.2	-6.98	56.4	0.0	0.99
43650.0	1978 MAY 21.5	0.41	320.2	-7.00	63.4	0.0	1.03
43652.0	1978 MAY 23.5	0.40	327.7	-6.90	70.8	0.0	1.06
43654.0	1978 MAY 25.5	0.39	335.5	-6.68	78.6	0.0	1.10
43656.0	1978 MAY 27.5	0.37	343.9	-6.30	86.9	0.0	1.13
43658.0	1978 MAY 29.5	0.36	352.7	-5.76	95.7	0.0	1.16
43660.0	1978 JUN 0.5	0.35	2.1	-5.03	105.1	0.0	1.19
43662.0	1978 JUN 2.5	0.34	12.1	-4.11	115.1	0.0	1.22
43664.0	1978 JUN 4.5	0.33	22.7	-2.99	125.7	0.0	1.25
43666.0	1978 JUN 6.5	0.32	33.9	-1.70	137.0	0.0	1.27
43668.0	1978 JUN 8.5	0.32	45.6	-0.27	148.9	0.0	1.29
43670.0	1978 JUN 10.5	0.31	57.8	1.22	161.1	0.0	1.31
43672.0	1978 JUN 12.5	0.31	70.3	2.69	173.6	0.0	1.32
43674.0	1978 JUN 14.5	0.31	83.0	4.04	186.3	0.0	1.32
43676.0	1978 JUN 16.5	0.31	95.5	5.19	198.9	0.0	1.32
43678.0	1978 JUN 18.5	0.32	107.8	6.07	211.2	0.0	1.31
43680.0	1978 JUN 20.5	0.32	119.7	6.66	223.0	0.0	1.30
43682.0	1978 JUN 22.5	0.33	131.1	6.96	234.3	0.0	1.28
43684.0	1978 JUN 24.5	0.34	141.8	6.99	244.9	0.0	1.26
43686.0	1978 JUN 26.5	0.35	151.8	6.80	254.9	0.0	1.24
43688.0	1978 JUN 28.5	0.36	161.3	6.43	264.3	0.0	1.21
43690.0	1978 JUL 0.5	0.37	170.1	5.93	273.1	0.0	1.19
43692.0	1978 JUL 2.5	0.39	178.4	5.33	281.4	0.0	1.16
43694.0	1978 JUL 4.5	0.40	186.3	4.66	289.2	0.0	1.13
43696.0	1978 JUL 6.5	0.41	193.6	3.95	296.5	0.0	1.10
43698.0	1978 JUL 8.5	0.42	200.6	3.22	303.6	0.0	1.07
43700.0	1978 JUL 10.5	0.43	207.3	2.47	310.3	0.0	1.03
43702.0	1978 JUL 12.5	0.44	213.7	1.72	316.8	0.0	1.00
43704.0	1978 JUL 14.5	0.44	219.9	0.98	323.0	0.0	0.97
43706.0	1978 JUL 16.5	0.45	225.8	0.25	329.0	0.0	0.94
43708.0	1978 JUL 18.5	0.46	231.6	-0.46	334.8	0.0	0.91
43710.0	1978 JUL 20.5	0.46	237.3	-1.16	340.6	0.0	0.88
43712.0	1978 JUL 22.5	0.46	242.9	-1.83	346.2	0.0	0.85
43714.0	1978 JUL 24.5	0.47	248.4	-2.47	351.8	0.0	0.82
43716.0	1978 JUL 26.5	0.47	253.9	-3.09	357.3	0.0	0.79
43718.0	1978 JUL 28.5	0.47	259.4	-3.68	2.8	0.0	0.76
43720.0	1978 JUL 30.5	0.47	264.9	-4.24	8.3	0.0	0.74
43722.0	1978 AUG 1.5	0.46	270.5	-4.76	13.9	0.0	0.71
43724.0	1978 AUG 3.5	0.46	276.1	-5.24	19.5	0.0	0.69
43726.0	1978 AUG 5.5	0.46	281.9	-5.68	25.2	0.0	0.67
43728.0	1978 AUG 7.5	0.45	287.7	-6.07	31.1	0.0	0.65
43730.0	1978 AUG 9.5	0.44	293.8	-6.40	37.1	0.0	0.63
43732.0	1978 AUG 11.5	0.44	300.0	-6.67	43.3	0.0	0.62
43734.0	1978 AUG 13.5	0.43	306.5	-6.87	49.8	0.0	0.61
43736.0	1978 AUG 15.5	0.42	313.3	-6.98	56.6	0.0	0.61
43738.0	1978 AUG 17.5	0.41	320.3	-7.00	63.5	0.0	0.61
43740.0	1978 AUG 19.5	0.40	327.8	-6.90	70.9	0.0	0.62
43742.0	1978 AUG 21.5	0.39	335.7	-6.67	78.7	0.0	0.64
43744.0	1978 AUG 23.5	0.37	344.0	-6.29	87.0	0.0	0.66
43746.0	1978 AUG 25.5	0.36	352.8	-5.75	95.8	0.0	0.69
43748.0	1978 AUG 27.5	0.35	2.3	-5.02	105.2	0.0	0.72
43750.0	1978 AUG 29.5	0.34	12.3	-4.09	115.2	0.0	0.77
43752.0	1978 SEP 0.5	0.33	22.9	-2.97	125.9	0.0	0.81
43754.0	1978 SEP 2.5	0.32	34.1	-1.68	137.1	0.0	0.86
43756.0	1978 SEP 4.5	0.32	45.8	-0.25	149.0	0.0	0.92
43758.0	1978 SEP 6.5	0.31	58.0	1.24	161.3	0.0	0.97
43760.0	1978 SEP 8.5	0.31	70.5	2.71	173.8	0.0	1.03
43762.0	1978 SEP 10.5	0.31	83.1	4.06	186.5	0.0	1.08
43764.0	1978 SEP 12.5	0.31	95.7	5.20	199.1	0.0	1.13
43766.0	1978 SEP 14.5	0.32	108.0	6.08	211.4	0.0	1.18
43768.0	1978 SEP 16.5	0.32	119.9	6.67	223.2	0.0	1.23
43770.0	1978 SEP 18.5	0.33	131.2	6.96	234.4	0.0	1.26
43772.0	1978 SEP 20.5	0.34	141.9	6.99	245.1	0.0	1.30
43774.0	1978 SEP 22.5	0.35	152.0	6.79	255.1	0.0	1.33
43776.0	1978 SEP 24.5	0.36	161.4	6.42	264.4	0.0	1.35
43778.0	1978 SEP 26.5	0.38	170.3	5.92	273.2	0.0	1.37
43780.0	1978 SEP 28.5	0.39	178.6	5.32	281.5	0.0	1.39
43782.0	1978 OCT 0.5	0.40	186.4	4.65	289.3	0.0	1.40
43784.0	1978 OCT 2.5	0.41	193.7	3.94	296.7	0.0	1.41
43786.0	1978 OCT 4.5	0.42	200.7	3.21	303.7	0.0	1.41
43788.0	1978 OCT 6.5	0.43	207.4	2.46	310.4	0.0	1.42
43790.0	1978 OCT 8.5	0.44	213.8	1.71	316.9	0.0	1.42
43792.0	1978 OCT 10.5	0.44	220.0	0.97	323.1	0.0	1.42
43794.0	1978 OCT 12.5	0.45	225.9	0.24	329.1	0.0	1.41
43796.0	1978 OCT 14.5	0.46	231.7	-0.47	334.9	0.0	1.41
43798.0	1978 OCT 16.5	0.46	237.4	-1.17	340.6	0.0	1.40
43800.0	1978 OCT 18.5	0.46	243.0	-1.84	346.3	0.0	1.39
43802.0	1978 OCT 20.5	0.47	248.5	-2.48	351.8	0.0	1.38
43804.0	1978 OCT 22.5	0.47	254.0	-3.10	357.4	0.0	1.36
43806.0	1978 OCT 24.5	0.47	259.5	-3.69	2.9	0.0	1.35
43808.0	1978 OCT 26.5	0.47	265.0	-4.25	8.4	0.0	1.33
43810.0	1978 OCT 28.5	0.46	270.6	-4.77	14.0	0.0	1.31
43812.0	1978 OCT 30.5	0.46	276.2	-5.25	19.6	0.0	1.29
43814.0	1978 NOV 1.5	0.46	282.0	-5.68	25.3	0.0	1.26
43816.0	1978 NOV 3.5	0.45	287.8	-6.07	31.2	0.0	1.24
43818.0	1978 NOV 5.5	0.44	293.9	-6.40	37.2	0.0	1.21
43820.0	1978 NOV 7.5	0.44	300.1	-6.67	43.4	0.0	1.18
43822.0	1978 NOV 9.5	0.43	306.6	-6.87	49.9	0.0	1.14
43824.0	1978 NOV 11.5	0.42	313.4	-6.98	56.6	0.0	1.11
43826.0	1978 NOV 13.5	0.41	320.5	-7.00	63.6	0.0	1.07
43828.0	1978 NOV 15.5	0.40	327.9	-6.90	71.0	0.0	1.03
43830.0	1978 NOV 17.5	0.39	335.8	-6.67	78.8	0.0	0.99
43832.0	1978 NOV 19.5	0.37	344.1	-6.29	87.1	0.0	0.95
43834.0	1978 NOV 21.5	0.36	353.0	-5.74	95.9	0.0	0.90
43836.0	1978 NOV 23.5	0.35	2.4	-5.00	105.4	0.0	0.86
43838.0	1978 NOV 25.5	0.34	12.4	-4.08	115.4	0.0	0.81
43840.0	1978 NOV 27.5	0.33	23.0	-2.95	126.0	0.0	0.77
43842.0	1978 NOV 29.5	0.32	34.2	-1.66	137.3	0.0	0.74
43844.0	1978 DEC 1.5	0.32	46.0	-0.23	149.2	0.0	0.71
43846.0	1978 DEC 3.5	0.31	58.2	1.26	161.4	0.0	0.69
43848.0	1978 DEC 5.5	0.31	70.7	2.73	174.0	0.0	0.68
43850.0	1978 DEC 7.5	0.31	83.3	4.08	186.7	0.0	0.68
43852.0	1978 DEC 9.5	0.31	95.9	5.22	199.3	0.0	0.70
43854.0	1978 DEC 11.5	0.32	108.2	6.09	211.6	0.0	0.73
43856.0	1978 DEC 13.5	0.32	120.1	6.67	223.4	0.0	0.76
43858.0	1978 DEC 15.5	0.33	131.4	6.96	234.6	0.0	0.81
43860.0	1978 DEC 17.5	0.34	142.1	6.99	245.2	0.0	0.85
43862.0	1978 DEC 19.5	0.35	152.1	6.79	255.2	0.0	0.90
43864.0	1978 DEC 21.5	0.36	161.6	6.42	264.6	0.0	0.94
43866.0	1978 DEC 23.5	0.38	170.4	5.91	273.4	0.0	0.99
43868.0	1978 DEC 25.5	0.39	178.7	5.31	281.6	0.0	1.03
43870.0	1978 DEC 27.5	0.40	186.5	4.64	289.4	0.0	1.07
43872.0	1978 DEC 29.5	0.41	193.9	3.93	296.8	0.0	1.11
43874.0	1979 JAN 0.5	0.42	200.8	3.19	303.8	0.0	1.14
43876.0	1979 JAN 2.5	0.43	207.5	2.45	310.5	0.0	1.18
43878.0	1979 JAN 4.5	0.44	213.9	1.70	317.0	0.0	1.21
43880.0	1979 JAN 6.5	0.44	220.0	0.96	323.2	0.0	1.24
43882.0	1979 JAN 8.5	0.45	226.0	0.23	329.2	0.0	1.26
43884.0	1979 JAN 10.5	0.46	231.8	-0.49	335.0	0.0	1.29
43886.0	1979 JAN 12.5	0.46	237.5	-1.18	340.7	0.0	1.31
43888.0	1979 JAN 14.5	0.46	243.1	-1.85	346.4	0.0	1.33
43890.0	1979 JAN 16.5	0.47	248.6	-2.49	351.9	0.0	1.35
43892.0	1979 JAN 18.5	0.47	254.1	-3.11	357.4	0.0	1.36
43894.0	1979 JAN 20.5	0.47	259.6	-3.70	3.0	0.0	1.37
43896.0	1979 JAN 22.5	0.47	265.1	-4.25	8.5	0.0	1.39
43898.0	1979 JAN 24.5	0.46	270.7	-4.77	14.1	0.0	1.39
43900.0	1979 JAN 26.5	0.46	276.3	-5.25	19.7	0.0	1.40
43902.0	1979 JAN 28.5	0.46	282.0	-5.69	25.4	0.0	1.41
43904.0	1979 JAN 30.5	0.45	287.9	-6.08	31.3	0.0	1.41
43906.0	1979 FEB 1.5	0.44	294.0	-6.41	37.3	0.0	1.41
43908.0	1979 FEB 3.5	0.44	300.2	-6.68	43.5	0.0	1.41
43910.0	1979 FEB 5.5	0.43	306.7	-6.87	50.0	0.0	1.41
43912.0	1979 FEB 7.5	0.42	313.5	-6.98	56.7	0.0	1.40
43914.0	1979 FEB 9.5	0.41	320.6	-7.00	63.7	0.0	1.39
43916.0	1979 FEB 11.5	0.40	328.0	-6.90	71.1	0.0	1.38
43918.0	1979 FEB 13.5	0.39	335.9	-6.66	78.9	0.0	1.37
43920.0	1979 FEB 15.5	0.37	344.3	-6.28	87.3	0.0	1.35
43922.0	1979 FEB 17.5	0.36	353.1	-5.73	96.1	0.0	1.32
43924.0	1979 FEB 19.5	0.35	2.6	-4.99	105.5	0.0	1.30
43926.0	1979 FEB 21.5	0.34	12.6	-4.06	115.5	0.0	1.27
43928.0	1979 FEB 23.5	0.33	23.2	-2.93	126.2	0.0	1.23
43930.0	1979 FEB 25.5	0.32	34.4	-1.64	137.5	0.0	1.19
43932.0	1979 FEB 27.5	0.32	46.2	-0.21	149.3	0.0	1.15
43934.0	1979 MAR 1.5	0.31	58.4	1.29	161.6	0.0	1.10
43936.0	1979 MAR 3.5	0.31	70.9	2.75	174.2	0.0	1.04
43938.0	1979 MAR 5.5	0.31	83.5	4.10	186.9	0.0	0.99
43940.0	1979 MAR 7.5	0.31	96.1	5.24	199.5	0.0	0.93
43942.0	1979 MAR 9.5	0.32	108.4	6.11	211.7	0.0	0.88
43944.0	1979 MAR 11.5	0.32	120.3	6.68	223.5	0.0	0.82
43946.0	1979 MAR 13.5	0.33	131.6	6.96	234.8	0.0	0.77
43948.0	1979 MAR 15.5	0.34	142.3	6.98	245.4	0.0	0.73
43950.0	1979 MAR 17.5	0.35	152.3	6.78	255.4	0.0	0.69
43952.0	1979 MAR 19.5	0.36	161.7	6.41	264.7	0.0	0.66
43954.0	1979 MAR 21.5	0.38	170.5	5.90	273.5	0.0	0.63
43956.0	1979 MAR 23.5	0.39	178.8	5.30	281.8	0.0	0.61
43958.0	1979 MAR 25.5	0.40	186.6	4.63	289.6	0.0	0.60
43960.0	1979 MAR 27.5	0.41	194.0	3.92	296.9	0.0	0.60
43962.0	1979 MAR 29.5	0.42	200.9	3.18	303.9	0.0	0.60
43964.0	1979 APR 0.5	0.43	207.6	2.44	310.6	0.0	0.61
43966.0	1979 APR 2.5	0.44	214.0	1.69	317.1	0.0	0.62
43968.0	1979 APR 4.5	0.44	220.1	0.95	323.2	0.0	0.63
43970.0	1979 APR 6.5	0.45	226.1	0.22	329.3	0.0	0.65
43972.0	1979 APR 8.5	0.46	231.9	-0.50	335.1	0.0	0.67
43974.0	1979 APR 10.5	0.46	237.6	-1.19	340.8	0.0	0.70
43976.0	1979 APR 12.5	0.46	243.2	-1.86	346.4	0.0	0.72
43978.0	1979 APR 14.5	0.47	248.7	-2.50	352.0	0.0	0.75

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST
43980.0	1979 APR 14.5	0.47	254.7	-3.12	357.5	0.0	0.78
43982.0	1979 APR 18.5	0.47	259.7	-3.71	3.0	0.0	0.81
43984.0	1979 APR 20.5	0.47	265.2	-4.26	8.6	0.0	0.84
43986.0	1979 APR 22.5	0.46	270.8	-4.78	14.1	0.0	0.87
43988.0	1979 APR 24.5	0.46	276.4	-5.24	19.8	0.0	0.90
43990.0	1979 APR 26.5	0.46	282.1	-5.70	25.5	0.0	0.93
43992.0	1979 APR 28.5	0.45	288.0	-6.08	31.4	0.0	0.96
43994.0	1979 MAY 0.5	0.44	294.1	-6.41	37.4	0.0	0.99
43996.0	1979 MAY 2.5	0.44	300.3	-6.68	43.6	0.0	1.02
43998.0	1979 MAY 4.5	0.43	306.8	-6.88	50.1	0.0	1.05
44000.0	1979 MAY 6.5	0.42	313.6	-6.98	56.9	0.0	1.08
44002.0	1979 MAY 8.5	0.41	320.7	-7.00	63.8	0.0	1.11
44004.0	1979 MAY 10.5	0.40	328.1	-6.89	71.2	0.0	1.14
44006.0	1979 MAY 12.5	0.39	336.0	-6.66	79.1	0.0	1.17
44008.0	1979 MAY 14.5	0.37	344.4	-6.27	87.4	0.0	1.20
44010.0	1979 MAY 16.5	0.36	353.3	-5.72	96.2	0.0	1.23
44012.0	1979 MAY 18.5	0.35	2.7	-4.98	105.7	0.0	1.25
44014.0	1979 MAY 20.5	0.34	12.7	-4.04	115.7	0.0	1.27
44016.0	1979 MAY 22.5	0.33	23.4	-2.92	126.4	0.0	1.29
44018.0	1979 MAY 24.5	0.32	34.6	-1.61	137.7	0.0	1.31
44020.0	1979 MAY 26.5	0.31	46.4	-0.18	149.5	0.0	1.32
44022.0	1979 MAY 28.5	0.31	58.6	1.31	161.8	0.0	1.32
44024.0	1979 MAY 30.5	0.31	71.1	2.78	174.4	0.0	1.32
44026.0	1979 JUN 1.5	0.31	83.7	4.12	187.1	0.0	1.31
44028.0	1979 JUN 3.5	0.31	96.3	5.25	199.7	0.0	1.30
44030.0	1979 JUN 5.5	0.32	108.6	6.12	211.9	0.0	1.29
44032.0	1979 JUN 7.5	0.32	120.4	6.69	223.7	0.0	1.26
44034.0	1979 JUN 9.5	0.33	131.7	6.96	234.9	0.0	1.24
44036.0	1979 JUN 11.5	0.34	142.4	6.98	245.5	0.0	1.21
44038.0	1979 JUN 13.5	0.35	152.4	6.78	255.5	0.0	1.18
44040.0	1979 JUN 15.5	0.36	161.9	6.40	264.9	0.0	1.15
44042.0	1979 JUN 17.5	0.38	170.7	5.90	273.6	0.0	1.11
44044.0	1979 JUN 19.5	0.39	178.9	5.29	281.9	0.0	1.08
44046.0	1979 JUN 21.5	0.40	186.7	4.62	289.7	0.0	1.04
44048.0	1979 JUN 23.5	0.41	194.1	3.91	297.0	0.0	1.01
44050.0	1979 JUN 25.5	0.42	201.1	3.17	304.0	0.0	0.97
44052.0	1979 JUN 27.5	0.43	207.7	2.42	310.7	0.0	0.94
44054.0	1979 JUN 29.5	0.44	214.1	1.68	317.2	0.0	0.90
44056.0	1979 JUL 1.5	0.44	220.2	0.93	323.3	0.0	0.87
44058.0	1979 JUL 3.5	0.45	226.2	0.21	329.3	0.0	0.84
44060.0	1979 JUL 5.5	0.46	232.0	-0.51	335.2	0.0	0.81
44062.0	1979 JUL 7.5	0.46	237.7	-1.20	340.9	0.0	0.78
44064.0	1979 JUL 9.5	0.46	243.3	-1.87	346.5	0.0	0.75
44066.0	1979 JUL 11.5	0.47	248.8	-2.51	352.1	0.0	0.72
44068.0	1979 JUL 13.5	0.47	254.3	-3.13	357.6	0.0	0.70
44070.0	1979 JUL 15.5	0.47	259.8	-3.72	3.1	0.0	0.67
44072.0	1979 JUL 17.5	0.47	265.3	-4.27	8.7	0.0	0.65
44074.0	1979 JUL 19.5	0.46	270.8	-4.79	14.2	0.0	0.63
44076.0	1979 JUL 21.5	0.46	276.5	-5.27	19.9	0.0	0.61
44078.0	1979 JUL 23.5	0.46	282.2	-5.70	25.6	0.0	0.60
44080.0	1979 JUL 25.5	0.45	288.1	-6.09	31.5	0.0	0.59
44082.0	1979 JUL 27.5	0.44	294.2	-6.42	37.5	0.0	0.59
44084.0	1979 JUL 29.5	0.44	300.4	-6.68	43.7	0.0	0.59
44086.0	1979 AUG 0.5	0.43	306.9	-6.88	50.2	0.0	0.59
44088.0	1979 AUG 2.5	0.42	313.7	-6.99	56.9	0.0	0.60
44090.0	1979 AUG 4.5	0.41	320.8	-6.99	63.9	0.0	0.62
44092.0	1979 AUG 6.5	0.40	328.3	-6.89	71.4	0.0	0.64
44094.0	1979 AUG 8.5	0.39	336.2	-6.65	79.2	0.0	0.67
44096.0	1979 AUG 10.5	0.37	344.5	-6.27	87.5	0.0	0.71
44098.0	1979 AUG 12.5	0.36	353.4	-5.71	96.4	0.0	0.75
44100.0	1979 AUG 14.5	0.35	2.8	-4.97	105.8	0.0	0.79
44102.0	1979 AUG 16.5	0.34	12.9	-4.03	115.9	0.0	0.84
44104.0	1979 AUG 18.5	0.33	23.5	-2.90	126.5	0.0	0.89
44106.0	1979 AUG 20.5	0.32	34.8	-1.59	137.8	0.0	0.94
44108.0	1979 AUG 22.5	0.31	46.6	-0.16	149.7	0.0	0.99
44110.0	1979 AUG 24.5	0.31	58.8	1.33	162.0	0.0	1.05
44112.0	1979 AUG 26.5	0.31	71.3	2.80	174.6	0.0	1.10
44114.0	1979 AUG 28.5	0.31	83.9	4.14	187.3	0.0	1.15
44116.0	1979 AUG 30.5	0.31	96.5	5.27	199.9	0.0	1.20
44118.0	1979 SEP 1.5	0.32	108.8	6.13	212.1	0.0	1.24
44120.0	1979 SEP 3.5	0.32	120.6	6.69	223.9	0.0	1.27
44122.0	1979 SEP 5.5	0.33	131.9	6.97	235.1	0.0	1.30
44124.0	1979 SEP 7.5	0.34	142.6	6.98	245.7	0.0	1.33
44126.0	1979 SEP 9.5	0.35	152.6	6.78	255.7	0.0	1.35
44128.0	1979 SEP 11.5	0.36	162.0	6.40	265.0	0.0	1.37
44130.0	1979 SEP 13.5	0.38	170.8	5.89	273.8	0.0	1.38
44132.0	1979 SEP 15.5	0.39	179.1	5.28	282.0	0.0	1.39
44134.0	1979 SEP 17.5	0.40	186.8	4.61	289.8	0.0	1.40
44136.0	1979 SEP 19.5	0.41	194.2	3.90	297.2	0.0	1.40
44138.0	1979 SEP 21.5	0.42	201.2	3.16	304.1	0.0	1.40
44140.0	1979 SEP 23.5	0.43	207.8	2.41	310.8	0.0	1.40
44142.0	1979 SEP 25.5	0.44	214.2	1.66	317.2	0.0	1.39
44144.0	1979 SEP 27.5	0.44	220.3	0.92	323.4	0.0	1.38
44146.0	1979 SEP 29.5	0.45	226.3	0.19	329.4	0.0	1.37
44148.0	1979 OCT 1.5	0.46	232.1	-0.52	335.3	0.0	1.36

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST
44150.0	1979 OCT 3.5	0.46	237.8	-1.21	341.0	0.0	1.35
44152.0	1979 OCT 5.5	0.46	243.3	-1.88	346.6	0.0	1.34
44154.0	1979 OCT 7.5	0.47	248.9	-2.52	352.2	0.0	1.32
44156.0	1979 OCT 9.5	0.47	254.4	-3.14	357.7	0.0	1.30
44158.0	1979 OCT 11.5	0.47	259.9	-3.72	3.2	0.0	1.28
44160.0	1979 OCT 13.5	0.47	265.4	-4.28	8.7	0.0	1.26
44162.0	1979 OCT 15.5	0.46	270.9	-4.80	14.3	0.0	1.24
44164.0	1979 OCT 17.5	0.46	276.6	-5.27	19.9	0.0	1.21
44166.0	1979 OCT 19.5	0.46	282.3	-5.71	25.7	0.0	1.18
44168.0	1979 OCT 21.5	0.45	288.2	-6.09	31.6	0.0	1.15
44170.0	1979 OCT 23.5	0.44	294.3	-6.42	37.6	0.0	1.12
44172.0	1979 OCT 25.5	0.44	300.5	-6.69	43.8	0.0	1.09
44174.0	1979 OCT 27.5	0.43	307.0	-6.88	50.3	0.0	1.06
44176.0	1979 OCT 29.5	0.42	313.8	-6.99	57.0	0.0	1.02
44178.0	1979 NOV 0.5	0.41	320.9	-6.99	64.0	0.0	0.98
44180.0	1979 NOV 2.5	0.40	328.4	-6.89	71.5	0.0	0.94
44182.0	1979 NOV 4.5	0.39	336.3	-6.65	79.3	0.0	0.90
44184.0	1979 NOV 6.5	0.37	344.7	-6.26	87.6	0.0	0.86
44186.0	1979 NOV 8.5	0.36	353.5	-5.70	96.5	0.0	0.82
44188.0	1979 NOV 10.5	0.35	3.0	-4.95	106.0	0.0	0.78
44190.0	1979 NOV 12.5	0.34	13.0	-4.01	116.0	0.0	0.74
44192.0	1979 NOV 14.5	0.33	23.7	-2.88	126.7	0.0	0.71
44194.0	1979 NOV 16.5	0.32	35.0	-1.57	138.0	0.0	0.69
44196.0	1979 NOV 18.5	0.31	46.7	-0.14	149.9	0.0	0.68
44198.0	1979 NOV 20.5	0.31	59.0	1.36	162.2	0.0	0.68
44200.0	1979 NOV 22.5	0.31	71.5	2.82	174.8	0.0	0.69
44202.0	1979 NOV 24.5	0.31	84.1	4.16	187.5	0.0	0.71
44204.0	1979 NOV 26.5	0.31	96.7	5.28	200.1	0.0	0.75
44206.0	1979 NOV 28.5	0.32	108.9	6.14	212.3	0.0	0.79
44208.0	1979 DEC 0.5	0.32	120.8	6.70	224.1	0.0	0.84
44210.0	1979 DEC 2.5	0.33	132.1	6.97	235.3	0.0	0.89
44212.0	1979 DEC 4.5	0.34	142.7	6.98	245.9	0.0	0.93
44214.0	1979 DEC 6.5	0.35	152.7	6.77	255.8	0.0	0.98
44216.0	1979 DEC 8.5	0.36	162.1	6.39	265.1	0.0	1.03
44218.0	1979 DEC 10.5	0.38	170.9	5.88	273.9	0.0	1.07
44220.0	1979 DEC 12.5	0.39	179.2	5.27	282.1	0.0	1.12
44222.0	1979 DEC 14.5	0.40	187.0	4.60	289.9	0.0	1.16
44224.0	1979 DEC 16.5	0.41	194.3	3.89	297.3	0.0	1.19
44226.0	1979 DEC 18.5	0.42	201.3	3.15	304.3	0.0	1.22
44228.0	1979 DEC 20.5	0.43	207.9	2.40	310.9	0.0	1.25
44230.0	1979 DEC 22.5	0.44	214.3	1.65	317.3	0.0	1.28
44232.0	1979 DEC 24.5	0.44	220.4	0.91	323.5	0.0	1.31
44234.0	1979 DEC 26.5	0.45	226.4	0.18	329.5	0.0	1.33
44236.0	1979 DEC 28.5	0.46	232.2	-0.53	335.4	0.0	1.35
44238.0	1979 DEC 30.5	0.46	237.8	-1.22	341.1	0.0	1.37
44240.0	1980 JAN 1.5	0.46	243.4	-1.89	346.7	0.0	1.38
44242.0	1980 JAN 3.5	0.47	249.0	-2.53	352.3	0.0	1.40
44244.0	1980 JAN 5.5	0.47	254.4	-3.15	357.8	0.0	1.41
44246.0	1980 JAN 7.5	0.47	259.9	-3.73	3.3	0.0	1.42
44248.0	1980 JAN 9.5	0.47	265.5	-4.29	8.8	0.0	1.42
44250.0	1980 JAN 11.5	0.46	271.0	-4.80	14.4	0.0	1.43
44252.0	1980 JAN 13.5	0.46	276.7	-5.28	20.0	0.0	1.43
44254.0	1980 JAN 15.5	0.45	282.4	-5.72	25.8	0.0	1.43
44256.0	1980 JAN 17.5	0.45	288.3	-6.10	31.6	0.0	1.43
44258.0	1980 JAN 19.5	0.44	294.3	-6.43	37.7	0.0	1.42
44260.0	1980 JAN 21.5	0.44	300.6	-6.69	43.9	0.0	1.42
44262.0	1980 JAN 23.5	0.43	307.1	-6.88	50.4	0.0	1.41
44264.0	1980 JAN 25.5	0.42	313.9	-6.99	57.1	0.0	1.40
44266.0	1980 JAN 27.5	0.41	321.0	-6.99	64.2	0.0	1.38
44268.0	1980 JAN 29.5	0.40	328.5	-6.88	71.6	0.0	1.36
44270.0	1980 FEB 0.5	0.39	336.4	-6.64	79.4	0.0	1.34
44272.0	1980 FEB 2.5	0.37	344.8	-6.25	87.8	0.0	1.32
44274.0	1980 FEB 4.5	0.36	353.7	-5.69	96.7	0.0	1.29
44276.0	1980 FEB 6.5	0.35	3.1	-4.94	106.1	0.0	1.25
44278.0	1980 FEB 8.5	0.34	13.2	-4.00	116.2	0.0	1.21
44280.0	1980 FEB 10.5	0.33	23.9	-2.86	126.9	0.0	1.17
44282.0	1980 FEB 12.5	0.32	35.1	-1.55	138.2	0.0	1.13
44284.0	1980 FEB 14.5	0.31	46.9	-0.11	150.1	0.0	1.08
44286.0	1980 FEB 16.5	0.31	59.2	1.38	162.4	0.0	1.02
44288.0	1980 FEB 18.5	0.31	71.7	2.84	175.0	0.0	0.97
44290.0	1980 FEB 20.5	0.31	84.3	4.18	187.7	0.0	0.91
44292.0	1980 FEB 22.5	0.31	96.9	5.30	200.2	0.0	0.86
44294.0	1980 FEB 24.5	0.32	109.1	6.15	212.5	0.0	0.80
44296.0	1980 FEB 26.5	0.32	121.0	6.70	224.3	0.0	0.75
44298.0	1980 MAR 0.5	0.33	132.2	6.97	235.4	0.0	0.71
44300.0	1980 MAR 1.5	0.34	142.9	6.98	246.0	0.0	0.68
44302.0	1980 MAR 3.5	0.35	152.9	6.77	256.0	0.0	0.65
44304.0	1980 MAR 5.5	0.36	162.3	6.38	265.3	0.0	0.63
44306.0	1980 MAR 7.5	0.38	171.1	5.87	274.0	0.0	0.62
44308.0	1980 MAR 9.5	0.39	179.3	5.26	282.3	0.0	0.62
44310.0	1980 MAR 11.5	0.40	187.1	4.59	290.0	0.0	0.62
44312.0	1980 MAR 13.5	0.41	194.4	3.87	297.4	0.0	0.63
44314.0	1980 MAR 15.5	0.42	201.4	3.14	304.4	0.0	0.65
44316.0	1980 MAR 17.5	0.43	208.0	2.39	311.0	0.0	0.67
44318.0	1980 MAR 19.5	0.44	214.4	1.64	317.4	0.0	0.69

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

	DATE		MERCURY R	LONG	LAT	RAS	DECS	DIST		DATE		MERCURY R	LONG	LAT	RAS	DECS	DIST
44320.0	1980 MAR	21.5	0.44	220.5	0.00	323.6	0.0	0.71	44490.0	1980 SEP	7.5	0.42	201.6	3.11	304.6	0.0	1.37
44322.0	1980 MAR	23.5	0.45	226.5	0.17	329.6	0.0	0.74	44492.0	1980 SEP	9.5	0.43	208.2	2.37	311.2	0.0	1.36
44324.0	1980 MAR	25.5	0.46	232.3	-0.54	335.5	0.0	0.77	44494.0	1980 SEP	11.5	0.44	214.6	1.62	317.6	0.0	1.35
44326.0	1980 MAR	27.5	0.46	237.9	-1.23	341.2	0.0	0.80	44496.0	1980 SEP	13.5	0.44	220.7	0.88	323.8	0.0	1.34
44328.0	1980 MAR	29.5	0.46	243.5	-1.90	346.8	0.0	0.82	44498.0	1980 SEP	15.5	0.45	226.6	0.15	329.8	0.0	1.32
44330.0	1980 APR	0.5	0.47	249.0	-2.54	352.3	0.0	0.85	44500.0	1980 SEP	17.5	0.46	232.4	-0.56	335.6	0.0	1.31
44332.0	1980 APR	2.5	0.47	254.5	-3.16	357.9	0.0	0.88	44502.0	1980 SEP	19.5	0.46	238.1	-1.25	341.3	0.0	1.29
44334.0	1980 APR	4.5	0.47	260.0	-3.74	3.4	0.0	0.91	44504.0	1980 SEP	21.5	0.46	243.7	-1.92	347.0	0.0	1.27
44336.0	1980 APR	6.5	0.47	265.5	-4.29	8.9	0.0	0.94	44506.0	1980 SEP	23.5	0.47	249.2	-2.56	352.5	0.0	1.25
44338.0	1980 APR	8.5	0.46	271.1	-4.81	14.5	0.0	0.97	44508.0	1980 SEP	25.5	0.47	254.7	-3.18	358.0	0.0	1.23
44340.0	1980 APR	10.5	0.46	276.7	-5.29	20.1	0.0	1.00	44510.0	1980 SEP	27.5	0.47	260.2	-3.76	3.6	0.0	1.20
44342.0	1980 APR	12.5	0.45	282.5	-5.72	25.9	0.0	1.03	44512.0	1980 SEP	29.5	0.47	265.7	-4.31	9.1	0.0	1.18
44344.0	1980 APR	14.5	0.45	288.4	-6.10	31.7	0.0	1.06	44514.0	1980 OCT	1.5	0.46	271.3	-4.83	14.7	0.0	1.15
44346.0	1980 APR	16.5	0.44	294.4	-6.43	37.8	0.0	1.08	44516.0	1980 OCT	3.5	0.46	276.9	-5.30	20.3	0.0	1.12
44348.0	1980 APR	18.5	0.44	300.7	-6.70	44.0	0.0	1.11	44518.0	1980 OCT	5.5	0.45	282.7	-5.73	26.0	0.0	1.09
44350.0	1980 APR	20.5	0.43	307.2	-6.88	50.5	0.0	1.14	44520.0	1980 OCT	7.5	0.45	288.6	-6.12	31.9	0.0	1.06
44352.0	1980 APR	22.5	0.42	314.0	-6.99	57.2	0.0	1.16	44522.0	1980 OCT	9.5	0.44	294.6	-6.44	38.0	0.0	1.03
44354.0	1980 APR	24.5	0.41	321.1	-6.99	64.3	0.0	1.19	44524.0	1980 OCT	11.5	0.43	300.9	-6.70	44.7	0.0	1.00
44356.0	1980 APR	26.5	0.40	328.6	-6.88	71.7	0.0	1.21	44526.0	1980 OCT	13.5	0.43	307.4	-6.89	50.7	0.0	0.96
44358.0	1980 APR	28.5	0.39	336.5	-6.64	79.6	0.0	1.24	44528.0	1980 OCT	15.5	0.42	314.2	-6.99	57.4	0.0	0.93
44360.0	1980 MAY	0.5	0.37	344.9	-6.24	87.9	0.0	1.26	44530.0	1980 OCT	17.5	0.41	321.3	-6.99	64.5	0.0	0.89
44362.0	1980 MAY	2.5	0.36	353.8	-5.68	96.9	0.0	1.28	44532.0	1980 OCT	19.5	0.40	328.9	-6.88	71.9	0.0	0.85
44364.0	1980 MAY	4.5	0.35	3.3	-4.93	106.3	0.0	1.29	44534.0	1980 OCT	21.5	0.39	336.8	-6.63	79.8	0.0	0.81
44366.0	1980 MAY	6.5	0.34	13.4	-3.98	116.3	0.0	1.31	44536.0	1980 OCT	23.5	0.37	345.2	-6.23	88.2	0.0	0.78
44368.0	1980 MAY	8.5	0.33	24.0	-2.84	127.0	0.0	1.32	44538.0	1980 OCT	25.5	0.36	354.1	-5.66	97.1	0.0	0.74
44370.0	1980 MAY	10.5	0.32	35.3	-1.53	138.4	0.0	1.32	44540.0	1980 OCT	27.5	0.35	3.6	-4.90	106.6	0.0	0.72
44372.0	1980 MAY	12.5	0.31	47.1	-0.09	150.3	0.0	1.32	44542.0	1980 OCT	29.5	0.34	13.7	-3.95	116.7	0.0	0.69
44374.0	1980 MAY	14.5	0.31	59.3	1.40	162.6	0.0	1.32	44544.0	1980 NOV	0.5	0.33	24.4	-2.90	127.4	0.0	0.68
44376.0	1980 MAY	16.5	0.31	71.9	2.86	175.2	0.0	1.31	44546.0	1980 NOV	2.5	0.32	35.7	-1.49	138.7	0.0	0.67
44378.0	1980 MAY	18.5	0.31	84.5	4.19	187.9	0.0	1.29	44548.0	1980 NOV	4.5	0.31	47.5	-0.05	150.6	0.0	0.68
44380.0	1980 MAY	20.5	0.31	97.1	5.31	200.4	0.0	1.27	44550.0	1980 NOV	6.5	0.31	59.7	1.45	163.0	0.0	0.70
44382.0	1980 MAY	22.5	0.32	109.3	6.16	212.7	0.0	1.25	44552.0	1980 NOV	8.5	0.31	72.3	2.91	175.6	0.0	0.73
44384.0	1980 MAY	24.5	0.32	121.1	6.71	224.4	0.0	1.21	44554.0	1980 NOV	10.5	0.31	84.9	4.23	188.3	0.0	0.77
44386.0	1980 MAY	26.5	0.33	132.4	6.97	235.6	0.0	1.18	44556.0	1980 NOV	12.5	0.31	97.4	5.34	200.9	0.0	0.81
44388.0	1980 MAY	28.5	0.34	143.0	6.98	246.2	0.0	1.14	44558.0	1980 NOV	14.5	0.32	109.7	6.18	213.3	0.0	0.86
44390.0	1980 MAY	30.5	0.35	153.0	6.76	256.1	0.0	1.11	44560.0	1980 NOV	16.5	0.32	121.5	6.72	224.8	0.0	0.92
44392.0	1980 JUN	1.5	0.36	162.4	6.38	265.4	0.0	1.07	44562.0	1980 NOV	18.5	0.33	132.7	6.98	235.9	0.0	0.97
44394.0	1980 JUN	3.5	0.38	171.2	5.86	274.2	0.0	1.03	44564.0	1980 NOV	20.5	0.34	143.4	6.97	246.5	0.0	1.02
44396.0	1980 JUN	5.5	0.39	179.4	5.25	282.4	0.0	0.99	44566.0	1980 NOV	22.5	0.35	153.3	6.75	256.4	0.0	1.07
44398.0	1980 JUN	7.5	0.40	187.2	4.58	290.1	0.0	0.95	44568.0	1980 NOV	24.5	0.37	162.7	6.36	265.7	0.0	1.11
44400.0	1980 JUN	9.5	0.41	194.5	3.86	297.5	0.0	0.91	44570.0	1980 NOV	26.5	0.38	171.5	5.84	274.4	0.0	1.16
44402.0	1980 JUN	11.5	0.42	201.5	3.13	304.5	0.0	0.88	44572.0	1980 NOV	28.5	0.39	179.7	5.23	282.6	0.0	1.20
44404.0	1980 JUN	13.5	0.43	208.1	2.38	311.1	0.0	0.84	44574.0	1980 DEC	0.5	0.40	187.4	4.56	290.4	0.0	1.23
44406.0	1980 JUN	15.5	0.44	214.5	1.63	317.5	0.0	0.81	44576.0	1980 DEC	2.5	0.41	194.7	3.84	297.7	0.0	1.26
44408.0	1980 JUN	17.5	0.44	220.6	0.89	323.7	0.0	0.77	44578.0	1980 DEC	4.5	0.42	201.7	3.10	304.7	0.0	1.29
44410.0	1980 JUN	19.5	0.45	226.5	0.16	329.7	0.0	0.74	44580.0	1980 DEC	6.5	0.43	208.3	2.35	311.3	0.0	1.32
44412.0	1980 JUN	21.5	0.46	232.3	-0.55	335.5	0.0	0.71	44582.0	1980 DEC	8.5	0.44	214.7	1.61	317.7	0.0	1.34
44414.0	1980 JUN	23.5	0.46	238.0	-1.24	341.3	0.0	0.68	44584.0	1980 DEC	10.5	0.44	220.8	0.87	323.9	0.0	1.36
44416.0	1980 JUN	25.5	0.46	243.6	-1.91	346.9	0.0	0.66	44586.0	1980 DEC	12.5	0.45	226.7	0.14	329.9	0.0	1.38
44418.0	1980 JUN	27.5	0.47	249.1	-2.55	352.4	0.0	0.64	44588.0	1980 DEC	14.5	0.46	232.5	-0.57	335.7	0.0	1.40
44420.0	1980 JUN	29.5	0.47	254.6	-3.17	358.0	0.0	0.62	44590.0	1980 DEC	16.5	0.46	238.2	-1.26	341.4	0.0	1.41
44422.0	1980 JUL	1.5	0.47	260.1	-3.75	3.5	0.0	0.60	44592.0	1980 DEC	18.5	0.46	243.8	-1.93	347.0	0.0	1.42
44424.0	1980 JUL	3.5	0.47	265.6	-4.30	9.0	0.0	0.59	44594.0	1980 DEC	20.5	0.47	249.3	-2.57	352.6	0.0	1.43
44426.0	1980 JUL	5.5	0.46	271.2	-4.82	14.5	0.0	0.58	44596.0	1980 DEC	22.5	0.47	254.8	-3.18	358.1	0.0	1.44
44428.0	1980 JUL	7.5	0.46	276.8	-5.30	20.2	0.0	0.57	44598.0	1980 DEC	24.5	0.47	260.3	-3.77	3.6	0.0	1.44
44430.0	1980 JUL	9.5	0.45	282.6	-5.73	26.0	0.0	0.57	44600.0	1980 DEC	26.5	0.47	265.8	-4.32	9.2	0.0	1.44
44432.0	1980 JUL	11.5	0.45	288.5	-6.11	31.8	0.0	0.57	44602.0	1980 DEC	28.5	0.46	271.4	-4.83	14.7	0.0	1.44
44434.0	1980 JUL	13.5	0.44	294.5	-6.44	37.9	0.0	0.58	44604.0	1980 DEC	30.5	0.46	277.0	-5.31	20.4	0.0	1.44
44436.0	1980 JUL	15.5	0.43	300.8	-6.70	44.1	0.0	0.59	44606.0	1981 JAN	1.5	0.45	282.8	-5.74	26.1	0.0	1.44
44438.0	1980 JUL	17.5	0.43	307.3	-6.89	50.6	0.0	0.61	44608.0	1981 JAN	3.5	0.45	288.7	-6.12	32.0	0.0	1.43
44440.0	1980 JUL	19.5	0.42	314.1	-6.99	57.3	0.0	0.64	44610.0	1981 JAN	5.5	0.44	294.7	-6.45	38.0	0.0	1.42
44442.0	1980 JUL	21.5	0.41	321.2	-6.99	64.4	0.0	0.66	44612.0	1981 JAN	7.5	0.43	301.0	-6.71	44.3	0.0	1.41
44444.0	1980 JUL	23.5	0.40	328.7	-6.88	71.8	0.0	0.70	44614.0	1981 JAN	9.5	0.43	307.5	-6.89	50.8	0.0	1.39
44446.0	1980 JUL	25.5	0.38	336.7	-6.63	79.7	0.0	0.73	44616.0	1981 JAN	11.5	0.42	314.3	-6.99	57.5	0.0	1.37
44448.0	1980 JUL	27.5	0.37	345.1	-6.24	88.0	0.0	0.77	44618.0	1981 JAN	13.5	0.41	321.5	-6.99	64.6	0.0	1.35
44450.0	1980 JUL	29.5	0.36	354.0	-5.67	96.9	0.0	0.82	44620.0	1981 JAN	15.5	0.40	329.0	-6.87	72.1	0.0	1.33
44452.0	1980 AUG	0.5	0.35	3.5	-4.91	106.4	0.0	0.87	44622.0	1981 JAN	17.5	0.38	336.9	-6.62	79.9	0.0	1.30
44454.0	1980 AUG	2.5	0.34	13.5	-3.96	116.5	0.0	0.92	44624.0	1981 JAN	19.5	0.37	345.3	-6.22	88.3	0.0	1.27
44456.0	1980 AUG	4.5	0.33	24.2	-2.82	127.2	0.0	0.97	44626.0	1981 JAN	21.5	0.36	354.3	-5.65	97.2	0.0	1.23
44458.0	1980 AUG	6.5	0.32	35.5	-1.51	138.6	0.0	1.02	44628.0	1981 JAN	23.5	0.35	3.8	-4.89	106.7	0.0	1.20
44460.0	1980 AUG	8.5	0.31	47.3	-0.07	150.5	0.0	1.07	44630.0	1981 JAN	25.5	0.34	13.8	-3.93	116.8	0.0	1.15
44462.0	1980 AUG	10.5	0.31	59.5	1.42	162.8	0.0	1.12	44632.0	1981 JAN	27.5	0.33	24.5	-2.78	127.6	0.0	1.10
44464.0	1980 AUG	12.5	0.31	72.1	2.88	175.4	0.0	1.17	44634.0	1981 JAN	29.5	0.32	35.8	-1.47	138.9	0.0	1.05
44466.0	1980 AUG	14.5	0.31	84.7	4.21	188.1	0.0	1.21	44636.0	1981 FEB	0.5	0.31	47.7	-0.02	150.8	0.0	1.00
44468.0	1980 AUG	16.5	0.31	97.2	5.33	200.6	0.0	1.25	44638.0	1981 FEB	2.5	0.31	59.9	1.47	163.2	0.0	0.94
44470.0	1980 AUG	18.5	0.32	109.5	6.17	212.9	0.0	1.28	44640.0	1981 FEB	4.5	0.31	72.5	2.93	175.8	0.0	0.89
44472.0	1980 AUG	20.5	0.32	121.3	6.72	224.6	0.0	1.31	44642.0	1981 FEB	6.5	0.31	85.1	4.25	188.5	0.0	0.83
44474.0	1980 AUG	22.5	0.33	132.6	6.97	235.8	0.0	1.33	44644.0	1981 FEB	8.5	0.31	97.6	5.36	201.0	0.0	0.78
44476.0	1980 AUG	24.5	0.34	143.2	6.97	246.3	0.0	1.35	44646.0	1981 FEB	10.5	0.32	109.9	6.19	213.2	0.0	0.74
44478.0	1980 AUG	26.5	0.35	153.2	6.76	256.3	0.0	1.36	44648.0	1981 FEB	12.5	0.32	121.7	6.73	225.0	0.0	0.70
44480.0	1980 AUG	28.5	0.36	162.6	6.37	265.6	0.0	1.37	44650.0	1981 FEB	14.5	0.33	132.9	6.98	236.1	0.0	0.67
44482.0	1980 AUG	30.5	0.38	171.3	5.85	274.3	0.0	1.38	44652.0	1981 FEB	16.5	0.34	143.5	6.97	246.6	0.0	0.65
44484.0	1980 SEP	1.5	0.39	179.6	5.24	282.5	0.0	1.38	44654.0	1981 FEB	18.5	0.35	153.5	6.75	256.5	0.0	0.64
44486.0	1980 SEP	3.5	0.40	187.3	4.57	290.3	0.0	1.38	44656.0	1981 FEB	20.5	0.37	162.8	6.35	265.8	0.0	0.64
44488.0	1980 SEP	5.5	0.41	194.6	3.85	297.6	0.0	1.37	44658.0	1981 FEB	22.5	0.38	171.6	5.83	274.6	0.0	0.64

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST
44660.0	1981 FEB 24.5	0.39	179.8	5.22	282.8	0.0	0.66
44662.0	1981 FEB 26.5	0.40	187.5	4.55	290.5	0.0	0.68
44664.0	1981 MAR 0.5	0.41	194.8	3.83	297.8	0.0	0.70
44666.0	1981 MAR 2.5	0.42	201.8	3.09	304.8	0.0	0.72
44668.0	1981 MAR 4.5	0.43	208.4	2.34	311.4	0.0	0.75
44670.0	1981 MAR 6.5	0.44	214.8	1.60	317.8	0.0	0.78
44672.0	1981 MAR 8.5	0.44	220.9	0.85	324.0	0.0	0.81
44674.0	1981 MAR 10.5	0.45	226.8	0.13	330.0	0.0	0.84
44676.0	1981 MAR 12.5	0.46	232.6	-0.58	335.8	0.0	0.87
44678.0	1981 MAR 14.5	0.46	238.3	-1.27	341.5	0.0	0.90
44680.0	1981 MAR 16.5	0.46	243.9	-1.94	347.1	0.0	0.93
44682.0	1981 MAR 18.5	0.47	249.4	-2.58	352.7	0.0	0.96
44684.0	1981 MAR 20.5	0.47	254.9	-3.19	358.2	0.0	0.99
44686.0	1981 MAR 22.5	0.47	260.4	-3.78	3.7	0.0	1.02
44688.0	1981 MAR 24.5	0.47	265.9	-4.33	9.3	0.0	1.04
44690.0	1981 MAR 26.5	0.46	271.4	-4.84	14.8	0.0	1.07
44692.0	1981 MAR 28.5	0.46	277.1	-5.32	20.5	0.0	1.10
44694.0	1981 MAR 30.5	0.45	282.9	-5.75	26.2	0.0	1.12
44696.0	1981 APR 1.5	0.45	288.8	-6.13	32.1	0.0	1.15
44698.0	1981 APR 3.5	0.44	294.8	-6.45	38.1	0.0	1.17
44700.0	1981 APR 5.5	0.43	301.1	-6.71	44.4	0.0	1.19
44702.0	1981 APR 7.5	0.43	307.6	-6.89	50.9	0.0	1.22
44704.0	1981 APR 9.5	0.42	314.4	-6.99	57.6	0.0	1.24
44706.0	1981 APR 11.5	0.41	321.6	-6.99	64.7	0.0	1.26
44708.0	1981 APR 13.5	0.40	329.1	-6.87	72.2	0.0	1.27
44710.0	1981 APR 15.5	0.38	337.0	-6.62	80.1	0.0	1.29
44712.0	1981 APR 17.5	0.37	345.5	-6.21	88.4	0.0	1.31
44714.0	1981 APR 19.5	0.36	354.4	-5.64	97.4	0.0	1.32
44716.0	1981 APR 21.5	0.35	3.9	-4.87	106.9	0.0	1.33
44718.0	1981 APR 23.5	0.34	14.0	-3.91	117.0	0.0	1.33
44720.0	1981 APR 25.5	0.33	24.7	-2.76	127.7	0.0	1.33
44722.0	1981 APR 27.5	0.32	36.0	-1.44	139.1	0.0	1.33
44724.0	1981 APR 29.5	0.31	47.8	-0.00	151.0	0.0	1.32
44726.0	1981 MAY 1.5	0.31	60.1	1.49	163.4	0.0	1.30
44728.0	1981 MAY 3.5	0.31	72.6	2.95	176.0	0.0	1.28
44730.0	1981 MAY 5.5	0.31	85.3	4.27	188.7	0.0	1.26
44732.0	1981 MAY 7.5	0.31	97.8	5.37	201.2	0.0	1.23
44734.0	1981 MAY 9.5	0.32	110.1	6.20	213.4	0.0	1.19
44736.0	1981 MAY 11.5	0.32	121.9	6.74	225.1	0.0	1.15
44738.0	1981 MAY 13.5	0.33	133.1	6.98	236.3	0.0	1.11
44740.0	1981 MAY 15.5	0.34	143.7	6.97	246.8	0.0	1.07
44742.0	1981 MAY 17.5	0.35	153.6	6.74	256.7	0.0	1.03
44744.0	1981 MAY 19.5	0.37	163.0	6.35	266.0	0.0	0.98
44746.0	1981 MAY 21.5	0.38	171.7	5.83	274.7	0.0	0.94
44748.0	1981 MAY 23.5	0.39	179.9	5.21	282.9	0.0	0.90
44750.0	1981 MAY 25.5	0.40	187.6	4.53	290.6	0.0	0.86
44752.0	1981 MAY 27.5	0.41	195.0	3.82	297.9	0.0	0.82
44754.0	1981 MAY 29.5	0.42	201.9	3.08	304.9	0.0	0.78
44756.0	1981 JUN 0.5	0.43	208.5	2.33	311.5	0.0	0.75
44758.0	1981 JUN 2.5	0.44	214.9	1.58	317.9	0.0	0.71
44760.0	1981 JUN 4.5	0.44	221.0	0.84	324.1	0.0	0.68
44762.0	1981 JUN 6.5	0.45	226.9	0.12	330.1	0.0	0.65
44764.0	1981 JUN 8.5	0.46	232.7	-0.59	335.9	0.0	0.63
44766.0	1981 JUN 10.5	0.46	238.4	-1.28	341.6	0.0	0.61
44768.0	1981 JUN 12.5	0.46	243.9	-1.95	347.2	0.0	0.59
44770.0	1981 JUN 14.5	0.47	249.5	-2.59	352.8	0.0	0.57
44772.0	1981 JUN 16.5	0.47	255.0	-3.20	358.3	0.0	0.56
44774.0	1981 JUN 18.5	0.47	260.4	-3.79	3.8	0.0	0.56
44776.0	1981 JUN 20.5	0.47	266.0	-4.34	9.3	0.0	0.55
44778.0	1981 JUN 22.5	0.46	271.5	-4.85	14.9	0.0	0.56
44780.0	1981 JUN 24.5	0.46	277.2	-5.32	20.6	0.0	0.56
44782.0	1981 JUN 26.5	0.45	282.9	-5.75	26.3	0.0	0.57
44784.0	1981 JUN 28.5	0.45	288.8	-6.13	32.2	0.0	0.59
44786.0	1981 JUL 0.5	0.44	294.9	-6.45	38.2	0.0	0.61
44788.0	1981 JUL 2.5	0.43	301.2	-6.71	44.5	0.0	0.64
44790.0	1981 JUL 4.5	0.43	307.7	-6.90	51.0	0.0	0.66
44792.0	1981 JUL 6.5	0.42	314.5	-6.99	57.7	0.0	0.69
44794.0	1981 JUL 8.5	0.41	321.7	-6.99	64.8	0.0	0.73
44796.0	1981 JUL 10.5	0.40	329.2	-6.87	72.3	0.0	0.77
44798.0	1981 JUL 12.5	0.38	337.2	-6.61	80.2	0.0	0.81
44800.0	1981 JUL 14.5	0.37	345.6	-6.21	88.6	0.0	0.85
44802.0	1981 JUL 16.5	0.36	354.5	-5.63	97.5	0.0	0.90
44804.0	1981 JUL 18.5	0.35	4.1	-4.86	107.0	0.0	0.95
44806.0	1981 JUL 20.5	0.34	14.2	-3.90	117.1	0.0	1.00
44808.0	1981 JUL 22.5	0.33	24.9	-2.74	127.9	0.0	1.04
44810.0	1981 JUL 24.5	0.32	36.2	-1.42	139.3	0.0	1.09
44812.0	1981 JUL 26.5	0.31	48.0	0.02	151.2	0.0	1.14
44814.0	1981 JUL 28.5	0.31	60.3	1.52	163.6	0.0	1.18
44816.0	1981 JUL 30.5	0.31	72.8	2.97	176.2	0.0	1.22
44818.0	1981 AUG 1.5	0.31	85.5	4.29	188.9	0.0	1.26
44820.0	1981 AUG 3.5	0.31	98.0	5.39	201.4	0.0	1.29
44822.0	1981 AUG 5.5	0.32	110.2	6.21	213.6	0.0	1.31
44824.0	1981 AUG 7.5	0.32	122.0	6.74	225.3	0.0	1.33
44826.0	1981 AUG 9.5	0.33	133.2	6.98	236.4	0.0	1.34
44828.0	1981 AUG 11.5	0.34	143.8	6.97	247.0	0.0	1.35
44830.0	1981 AUG 13.5	0.35	153.8	6.74	256.8	0.0	1.36
44832.0	1981 AUG 15.5	0.37	163.1	6.34	266.1	0.0	1.36
44834.0	1981 AUG 17.5	0.38	171.8	5.82	274.9	0.0	1.36
44836.0	1981 AUG 19.5	0.39	180.0	5.20	283.0	0.0	1.35
44838.0	1981 AUG 21.5	0.40	187.8	4.52	290.7	0.0	1.34
44840.0	1981 AUG 23.5	0.41	195.1	3.81	298.0	0.0	1.33
44842.0	1981 AUG 25.5	0.42	202.0	3.07	305.0	0.0	1.32
44844.0	1981 AUG 27.5	0.43	208.6	2.32	311.6	0.0	1.31
44846.0	1981 AUG 29.5	0.44	214.9	1.57	318.0	0.0	1.29
44848.0	1981 SEP 0.5	0.44	221.1	0.83	324.2	0.0	1.27
44850.0	1981 SEP 2.5	0.45	227.0	0.11	330.2	0.0	1.25
44852.0	1981 SEP 4.5	0.46	232.8	-0.60	336.0	0.0	1.23
44854.0	1981 SEP 6.5	0.46	238.4	-1.29	341.7	0.0	1.21
44856.0	1981 SEP 8.5	0.46	244.0	-1.96	347.3	0.0	1.19
44858.0	1981 SEP 10.5	0.47	249.5	-2.60	352.9	0.0	1.17
44860.0	1981 SEP 12.5	0.47	255.0	-3.21	358.4	0.0	1.14
44862.0	1981 SEP 14.5	0.47	260.5	-3.79	3.9	0.0	1.11
44864.0	1981 SEP 16.5	0.47	266.0	-4.34	9.4	0.0	1.09
44866.0	1981 SEP 18.5	0.46	271.6	-4.86	15.0	0.0	1.06
44868.0	1981 SEP 20.5	0.46	277.3	-5.33	20.6	0.0	1.03
44870.0	1981 SEP 22.5	0.45	283.0	-5.76	26.4	0.0	1.00
44872.0	1981 SEP 24.5	0.45	288.9	-6.14	32.3	0.0	0.97
44874.0	1981 SEP 26.5	0.44	295.0	-6.46	38.3	0.0	0.93
44876.0	1981 SEP 28.5	0.43	301.3	-6.72	44.6	0.0	0.90
44878.0	1981 OCT 0.5	0.43	307.8	-6.90	51.1	0.0	0.87
44880.0	1981 OCT 2.5	0.42	314.6	-6.99	57.8	0.0	0.83
44882.0	1981 OCT 4.5	0.41	321.8	-6.99	64.9	0.0	0.80
44884.0	1981 OCT 6.5	0.40	329.3	-6.87	72.4	0.0	0.77
44886.0	1981 OCT 8.5	0.38	337.3	-6.61	80.3	0.0	0.74
44888.0	1981 OCT 10.5	0.37	345.7	-6.20	88.7	0.0	0.71
44890.0	1981 OCT 12.5	0.36	354.7	-5.62	97.6	0.0	0.69
44892.0	1981 OCT 14.5	0.35	4.2	-4.85	107.2	0.0	0.67
44894.0	1981 OCT 16.5	0.34	14.3	-3.88	117.3	0.0	0.66
44896.0	1981 OCT 18.5	0.33	25.1	-2.73	128.1	0.0	0.67
44898.0	1981 OCT 20.5	0.32	36.4	-1.40	139.5	0.0	0.68
44900.0	1981 OCT 22.5	0.31	48.2	0.04	151.4	0.0	0.71
44902.0	1981 OCT 24.5	0.31	60.5	1.54	163.7	0.0	0.74
44904.0	1981 OCT 26.5	0.31	73.0	2.99	176.4	0.0	0.79
44906.0	1981 OCT 28.5	0.31	85.7	4.31	189.0	0.0	0.84
44908.0	1981 OCT 30.5	0.31	98.2	5.40	201.6	0.0	0.89
44910.0	1981 NOV 1.5	0.32	110.4	6.22	213.8	0.0	0.94
44912.0	1981 NOV 3.5	0.32	122.2	6.75	225.5	0.0	1.00
44914.0	1981 NOV 5.5	0.33	133.4	6.98	236.6	0.0	1.05
44916.0	1981 NOV 7.5	0.34	144.0	6.96	247.1	0.0	1.10
44918.0	1981 NOV 9.5	0.36	153.9	6.73	257.0	0.0	1.15
44920.0	1981 NOV 11.5	0.37	163.2	6.33	266.2	0.0	1.19
44922.0	1981 NOV 13.5	0.38	172.0	5.81	274.9	0.0	1.23
44924.0	1981 NOV 15.5	0.39	180.2	5.19	283.1	0.0	1.26
44926.0	1981 NOV 17.5	0.40	187.9	4.51	290.8	0.0	1.29
44928.0	1981 NOV 19.5	0.41	195.2	3.80	298.1	0.0	1.32
44930.0	1981 NOV 21.5	0.42	202.1	3.06	305.1	0.0	1.35
44932.0	1981 NOV 23.5	0.43	208.7	2.31	311.7	0.0	1.37
44934.0	1981 NOV 25.5	0.44	215.0	1.56	318.1	0.0	1.39
44936.0	1981 NOV 27.5	0.45	221.2	0.82	324.3	0.0	1.41
44938.0	1981 NOV 29.5	0.45	227.1	0.09	330.2	0.0	1.42
44940.0	1981 DEC 1.5	0.46	232.9	-0.61	336.1	0.0	1.43
44942.0	1981 DEC 3.5	0.46	238.5	-1.30	341.8	0.0	1.44
44944.0	1981 DEC 5.5	0.46	244.1	-1.97	347.4	0.0	1.45
44946.0	1981 DEC 7.5	0.47	249.6	-2.61	352.9	0.0	1.45
44948.0	1981 DEC 9.5	0.47	255.1	-3.22	358.5	0.0	1.45
44950.0	1981 DEC 11.5	0.47	260.6	-3.80	4.0	0.0	1.45
44952.0	1981 DEC 13.5	0.47	266.1	-4.35	9.5	0.0	1.45
44954.0	1981 DEC 15.5	0.46	271.7	-4.86	15.1	0.0	1.44
44956.0	1981 DEC 17.5	0.46	277.4	-5.34	20.7	0.0	1.43
44958.0	1981 DEC 19.5	0.45	283.1	-5.77	26.5	0.0	1.42
44960.0	1981 DEC 21.5	0.45	289.0	-6.14	32.4	0.0	1.41
44962.0	1981 DEC 23.5	0.44	295.1	-6.46	38.4	0.0	1.40
44964.0	1981 DEC 25.5	0.43	301.4	-6.72	44.7	0.0	1.38
44966.0	1981 DEC 27.5	0.43	307.9	-6.90	51.2	0.0	1.36
44968.0	1981 DEC 29.5	0.42	314.8	-6.99	57.9	0.0	1.34
44970.0	1982 JAN 0.5	0.41	321.9	-6.99	65.0	0.0	1.31
44972.0	1982 JAN 2.5	0.40	329.4	-6.86	72.5	0.0	1.28
44974.0	1982 JAN 4.5	0.38	337.4	-6.60	80.4	0.0	1.25
44976.0	1982 JAN 6.5	0.37	345.9	-6.19	88.8	0.0	1.21
44978.0	1982 JAN 8.5	0.36	354.8	-5.61	97.8	0.0	1.17
44980.0	1982 JAN 10.5	0.35	4.4	-4.83	107.3	0.0	1.13
44982.0	1982 JAN 12.5	0.34	14.5	-3.87	117.5	0.0	1.08
44984.0	1982 JAN 14.5	0.33	25.2	-2.71	128.2	0.0	1.03
44986.0	1982 JAN 16.5	0.32	36.6	-1.38	139.6	0.0	0.98
44988.0	1982 JAN 18.5	0.31	48.4	0.07	151.6	0.0	0.92
44990.0	1982 JAN 20.5	0.31	60.7	1.56	163.9	0.0	0.87
44992.0	1982 JAN 22.5	0.31	73.2	3.01	176.6	0.0	0.81
44994.0	1982 JAN 24.5	0.31	85.9	4.33	189.2	0.0	0.77
44996.0	1982 JAN 26.5	0.31	98.4	5.42	201.8	0.0	0.72
44998.0	1982 JAN 28.5	0.32	110.6	6.23	214.0	0.0	0.69

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST
45000.0	1982 JAN 30.5	0.32	127.4	6.75	225.7	0.0	0.67
45002.0	1982 FEB 1.5	0.33	133.6	6.98	236.8	0.0	0.66
45004.0	1982 FEB 3.5	0.34	144.2	6.96	247.3	0.0	0.65
45006.0	1982 FEB 5.5	0.35	154.1	6.73	257.1	0.0	0.66
45008.0	1982 FEB 7.5	0.37	163.4	6.33	266.4	0.0	0.68
45010.0	1982 FEB 9.5	0.38	172.1	5.80	275.1	0.0	0.70
45012.0	1982 FEB 11.5	0.39	180.3	5.18	283.2	0.0	0.72
45014.0	1982 FEB 13.5	0.40	188.0	4.50	290.9	0.0	0.75
45016.0	1982 FEB 15.5	0.41	195.3	3.78	298.3	0.0	0.78
45018.0	1982 FEB 17.5	0.42	202.2	3.05	305.2	0.0	0.82
45020.0	1982 FEB 19.5	0.43	208.8	2.30	311.8	0.0	0.85
45022.0	1982 FEB 21.5	0.44	215.1	1.55	318.2	0.0	0.88
45024.0	1982 FEB 23.5	0.45	221.3	0.81	324.4	0.0	0.91
45026.0	1982 FEB 25.5	0.45	227.2	0.08	330.3	0.0	0.94
45028.0	1982 FEB 27.5	0.46	233.0	-0.63	336.2	0.0	0.97
45030.0	1982 MAR 1.5	0.46	238.6	-1.31	341.9	0.0	1.00
45032.0	1982 MAR 3.5	0.46	244.2	-1.98	347.5	0.0	1.03
45034.0	1982 MAR 5.5	0.47	249.7	-2.62	353.0	0.0	1.06
45036.0	1982 MAR 7.5	0.47	255.2	-3.23	358.5	0.0	1.09
45038.0	1982 MAR 9.5	0.47	260.7	-3.81	4.1	0.0	1.11
45040.0	1982 MAR 11.5	0.47	266.2	-4.36	9.6	0.0	1.14
45042.0	1982 MAR 13.5	0.46	271.8	-4.87	15.2	0.0	1.16
45044.0	1982 MAR 15.5	0.46	277.4	-5.34	20.8	0.0	1.19
45046.0	1982 MAR 17.5	0.45	283.2	-5.77	26.6	0.0	1.21
45048.0	1982 MAR 19.5	0.45	289.1	-6.15	32.5	0.0	1.23
45050.0	1982 MAR 21.5	0.44	295.2	-6.47	38.5	0.0	1.25
45052.0	1982 MAR 23.5	0.43	301.5	-6.72	44.8	0.0	1.27
45054.0	1982 MAR 25.5	0.43	308.0	-6.90	51.3	0.0	1.28
45056.0	1982 MAR 27.5	0.42	314.9	-6.99	58.1	0.0	1.30
45058.0	1982 MAR 29.5	0.41	322.0	-6.99	65.2	0.0	1.31
45060.0	1982 APR 0.5	0.39	329.6	-6.86	72.6	0.0	1.32
45062.0	1982 APR 2.5	0.38	337.5	-6.60	80.6	0.0	1.33
45064.0	1982 APR 4.5	0.37	346.0	-6.18	89.0	0.0	1.34
45066.0	1982 APR 6.5	0.36	355.0	-5.60	97.9	0.0	1.34
45068.0	1982 APR 8.5	0.35	4.5	-4.82	107.5	0.0	1.34
45070.0	1982 APR 10.5	0.34	14.6	-3.85	117.6	0.0	1.34
45072.0	1982 APR 12.5	0.33	25.4	-2.69	128.4	0.0	1.33
45074.0	1982 APR 14.5	0.32	36.7	-1.36	139.8	0.0	1.32
45076.0	1982 APR 16.5	0.31	48.6	0.09	151.8	0.0	1.30
45078.0	1982 APR 18.5	0.31	60.9	1.58	164.1	0.0	1.27
45080.0	1982 APR 20.5	0.31	73.4	3.03	176.8	0.0	1.25
45082.0	1982 APR 22.5	0.31	86.1	4.35	189.4	0.0	1.21
45084.0	1982 APR 24.5	0.31	98.6	5.43	202.0	0.0	1.17
45086.0	1982 APR 26.5	0.32	110.8	6.24	214.1	0.0	1.13
45088.0	1982 APR 28.5	0.32	122.6	6.76	225.8	0.0	1.08
45090.0	1982 MAY 0.5	0.33	133.7	6.99	236.9	0.0	1.04
45092.0	1982 MAY 2.5	0.34	144.3	6.96	247.4	0.0	0.99
45094.0	1982 MAY 4.5	0.35	154.2	6.72	257.3	0.0	0.94
45096.0	1982 MAY 6.5	0.37	163.5	6.32	266.5	0.0	0.90
45098.0	1982 MAY 8.5	0.38	172.2	5.79	275.2	0.0	0.85
45100.0	1982 MAY 10.5	0.39	180.4	5.17	283.4	0.0	0.81
45102.0	1982 MAY 12.5	0.40	188.1	4.49	291.1	0.0	0.77
45104.0	1982 MAY 14.5	0.41	195.4	3.77	298.4	0.0	0.73
45106.0	1982 MAY 16.5	0.42	202.3	3.03	305.3	0.0	0.70
45108.0	1982 MAY 18.5	0.43	208.9	2.29	311.9	0.0	0.66
45110.0	1982 MAY 20.5	0.44	215.2	1.54	318.3	0.0	0.64
45112.0	1982 MAY 22.5	0.45	221.3	0.80	324.5	0.0	0.61
45114.0	1982 MAY 24.5	0.45	227.3	0.07	330.4	0.0	0.59
45116.0	1982 MAY 26.5	0.46	233.0	-0.64	336.2	0.0	0.57
45118.0	1982 MAY 28.5	0.46	238.7	-1.32	342.0	0.0	0.56
45120.0	1982 MAY 30.5	0.46	244.3	-1.99	347.6	0.0	0.55
45122.0	1982 JUN 1.5	0.47	249.8	-2.63	353.1	0.0	0.55
45124.0	1982 JUN 3.5	0.47	255.3	-3.24	358.6	0.0	0.55
45126.0	1982 JUN 5.5	0.47	260.8	-3.82	4.1	0.0	0.56
45128.0	1982 JUN 7.5	0.46	266.3	-4.37	9.7	0.0	0.57
45130.0	1982 JUN 9.5	0.46	271.9	-4.88	15.3	0.0	0.58
45132.0	1982 JUN 11.5	0.46	277.5	-5.35	20.9	0.0	0.60
45134.0	1982 JUN 13.5	0.45	283.3	-5.78	26.7	0.0	0.62
45136.0	1982 JUN 15.5	0.45	289.2	-6.15	32.6	0.0	0.64
45138.0	1982 JUN 17.5	0.44	295.3	-6.47	38.6	0.0	0.67
45140.0	1982 JUN 19.5	0.43	301.6	-6.73	44.9	0.0	0.70
45142.0	1982 JUN 21.5	0.43	308.1	-6.90	51.4	0.0	0.74
45144.0	1982 JUN 23.5	0.42	315.0	-7.00	58.2	0.0	0.77
45146.0	1982 JUN 25.5	0.41	322.1	-6.98	65.3	0.0	0.81
45148.0	1982 JUN 27.5	0.39	329.7	-6.86	72.8	0.0	0.85
45150.0	1982 JUN 29.5	0.38	337.7	-6.59	80.7	0.0	0.89
45152.0	1982 JUL 1.5	0.37	346.1	-6.18	89.1	0.0	0.94
45154.0	1982 JUL 3.5	0.36	355.1	-5.59	98.1	0.0	0.98
45156.0	1982 JUL 5.5	0.35	4.7	-4.81	107.6	0.0	1.03
45158.0	1982 JUL 7.5	0.34	14.8	-3.83	117.8	0.0	1.07
45160.0	1982 JUL 9.5	0.33	25.6	-2.67	128.6	0.0	1.12
45162.0	1982 JUL 11.5	0.32	36.9	-1.34	140.0	0.0	1.16
45164.0	1982 JUL 13.5	0.31	48.8	0.11	152.0	0.0	1.20
45166.0	1982 JUL 15.5	0.31	61.1	1.61	164.3	0.0	1.23
45168.0	1982 JUL 17.5	0.31	73.6	3.06	177.0	0.0	1.27
45170.0	1982 JUL 19.5	0.31	86.3	4.36	189.6	0.0	1.29
45172.0	1982 JUL 21.5	0.31	98.8	5.45	202.2	0.0	1.31
45174.0	1982 JUL 23.5	0.32	111.0	6.25	214.3	0.0	1.33
45176.0	1982 JUL 25.5	0.32	122.7	6.76	226.0	0.0	1.34
45178.0	1982 JUL 27.5	0.33	133.9	6.99	237.1	0.0	1.34
45180.0	1982 JUL 29.5	0.34	144.5	6.96	247.6	0.0	1.34
45182.0	1982 AUG 0.5	0.35	154.4	6.72	257.4	0.0	1.34
45184.0	1982 AUG 2.5	0.37	163.7	6.31	266.7	0.0	1.33
45186.0	1982 AUG 4.5	0.38	172.4	5.78	275.3	0.0	1.32
45188.0	1982 AUG 6.5	0.39	180.5	5.16	283.5	0.0	1.31
45190.0	1982 AUG 8.5	0.40	188.2	4.48	291.2	0.0	1.29
45192.0	1982 AUG 10.5	0.41	195.5	3.76	298.5	0.0	1.28
45194.0	1982 AUG 12.5	0.42	202.4	3.02	305.4	0.0	1.26
45196.0	1982 AUG 14.5	0.43	209.0	2.27	312.0	0.0	1.24
45198.0	1982 AUG 16.5	0.44	215.3	1.53	318.4	0.0	1.22
45200.0	1982 AUG 18.5	0.45	221.4	0.79	324.6	0.0	1.20
45202.0	1982 AUG 20.5	0.45	227.4	0.06	330.5	0.0	1.17
45204.0	1982 AUG 22.5	0.46	233.1	-0.65	336.3	0.0	1.15
45206.0	1982 AUG 24.5	0.46	238.8	-1.33	342.0	0.0	1.12
45208.0	1982 AUG 26.5	0.46	244.4	-2.00	347.6	0.0	1.10
45210.0	1982 AUG 28.5	0.47	249.9	-2.64	353.2	0.0	1.07
45212.0	1982 AUG 30.5	0.47	255.4	-3.25	358.7	0.0	1.04
45214.0	1982 SEP 1.5	0.47	260.9	-3.83	4.2	0.0	1.02
45216.0	1982 SEP 3.5	0.46	266.4	-4.38	9.8	0.0	0.99
45218.0	1982 SEP 5.5	0.46	272.0	-4.89	15.3	0.0	0.96
45220.0	1982 SEP 7.5	0.46	277.6	-5.36	21.0	0.0	0.93
45222.0	1982 SEP 9.5	0.45	283.4	-5.78	26.8	0.0	0.90
45224.0	1982 SEP 11.5	0.45	289.3	-6.16	32.7	0.0	0.87
45226.0	1982 SEP 13.5	0.44	295.4	-6.48	38.7	0.0	0.83
45228.0	1982 SEP 15.5	0.43	301.7	-6.73	45.0	0.0	0.80
45230.0	1982 SEP 17.5	0.43	308.2	-6.91	51.5	0.0	0.77
45232.0	1982 SEP 19.5	0.42	315.1	-7.00	58.3	0.0	0.74
45234.0	1982 SEP 21.5	0.41	322.3	-6.98	65.4	0.0	0.72
45236.0	1982 SEP 23.5	0.39	329.8	-6.85	72.9	0.0	0.69
45238.0	1982 SEP 25.5	0.38	337.8	-6.59	80.8	0.0	0.67
45240.0	1982 SEP 27.5	0.37	346.3	-6.17	89.2	0.0	0.66
45242.0	1982 SEP 29.5	0.36	355.2	-5.58	98.2	0.0	0.65
45244.0	1982 OCT 1.5	0.35	4.8	-4.79	107.8	0.0	0.65
45246.0	1982 OCT 3.5	0.34	15.0	-3.82	117.9	0.0	0.67
45248.0	1982 OCT 5.5	0.33	25.7	-2.65	128.8	0.0	0.69
45250.0	1982 OCT 7.5	0.32	37.1	-1.32	140.2	0.0	0.72
45252.0	1982 OCT 9.5	0.31	49.0	0.14	152.1	0.0	0.76
45254.0	1982 OCT 11.5	0.31	61.3	1.63	164.5	0.0	0.80
45256.0	1982 OCT 13.5	0.31	73.8	3.08	177.1	0.0	0.86
45258.0	1982 OCT 15.5	0.31	86.4	4.38	189.8	0.0	0.91
45260.0	1982 OCT 17.5	0.31	99.0	5.46	202.3	0.0	0.97
45262.0	1982 OCT 19.5	0.32	111.2	6.26	214.5	0.0	1.02
45264.0	1982 OCT 21.5	0.32	122.9	6.77	226.2	0.0	1.08
45266.0	1982 OCT 23.5	0.33	134.1	6.99	237.3	0.0	1.13
45268.0	1982 OCT 25.5	0.34	144.6	6.96	247.7	0.0	1.17
45270.0	1982 OCT 27.5	0.36	154.5	6.71	257.6	0.0	1.21
45272.0	1982 OCT 29.5	0.37	163.8	6.30	266.8	0.0	1.25
45274.0	1982 NOV 0.5	0.38	172.5	5.77	275.5	0.0	1.29
45276.0	1982 NOV 2.5	0.39	180.7	5.15	283.6	0.0	1.32
45278.0	1982 NOV 4.5	0.40	188.3	4.47	291.3	0.0	1.34
45280.0	1982 NOV 6.5	0.41	195.6	3.75	298.6	0.0	1.37
45282.0	1982 NOV 8.5	0.42	202.5	3.01	305.5	0.0	1.39
45284.0	1982 NOV 10.5	0.43	209.1	2.26	312.1	0.0	1.40
45286.0	1982 NOV 12.5	0.44	215.4	1.51	318.5	0.0	1.42
45288.0	1982 NOV 14.5	0.45	221.5	0.78	324.6	0.0	1.43
45290.0	1982 NOV 16.5	0.45	227.4	0.05	330.6	0.0	1.44
45292.0	1982 NOV 18.5	0.46	233.2	-0.66	336.4	0.0	1.44
45294.0	1982 NOV 20.5	0.46	238.9	-1.35	342.1	0.0	1.45
45296.0	1982 NOV 22.5	0.46	244.5	-2.01	347.7	0.0	1.45
45298.0	1982 NOV 24.5	0.47	250.0	-2.65	353.3	0.0	1.45
45300.0	1982 NOV 26.5	0.47	255.5	-3.26	358.8	0.0	1.45
45302.0	1982 NOV 28.5	0.47	261.0	-3.84	4.3	0.0	1.44
45304.0	1982 DEC 0.5	0.46	266.5	-4.38	9.9	0.0	1.43
45306.0	1982 DEC 2.5	0.46	272.1	-4.89	15.4	0.0	1.42
45308.0	1982 DEC 4.5	0.46	277.7	-5.36	21.1	0.0	1.41
45310.0	1982 DEC 6.5	0.45	283.5	-5.79	26.8	0.0	1.40
45312.0	1982 DEC 8.5	0.45	289.4	-6.16	32.7	0.0	1.38
45314.0	1982 DEC 10.5	0.44	295.5	-6.48	38.8	0.0	1.36
45316.0	1982 DEC 12.5	0.43	301.8	-6.73	45.1	0.0	1.34
45318.0	1982 DEC 14.5	0.43	308.3	-6.91	51.6	0.0	1.31
45320.0	1982 DEC 16.5	0.42	315.2	-7.00	58.4	0.0	1.28
45322.0	1982 DEC 18.5	0.41	322.4	-6.98	65.5	0.0	1.25
45324.0	1982 DEC 20.5	0.39	329.9	-6.85	73.0	0.0	1.22
45326.0	1982 DEC 22.5	0.38	337.9	-6.58	80.9	0.0	1.18
45328.0	1982 DEC 24.5	0.37	346.4	-6.16	89.4	0.0	1.14
45330.0	1982 DEC 26.5	0.36	355.4	-5.56	98.3	0.0	1.10
45332.0	1982 DEC 28.5	0.35	5.0	-4.78	107.9	0.0	1.05
45334.0	1982 DEC 30.5	0.34	15.1	-3.80	118.1	0.0	1.00
45336.0	1983 JAN 1.5	0.33	25.9	-2.63	128.9	0.0	0.95
45338.0	1983 JAN 3.5	0.32	37.3	-1.29	140.4	0.0	0.90

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	COIST
45340.0	1983 JAN 5.5	0.31	49.1	0.16	152.3	0.0	0.84
45342.0	1983 JAN 7.5	0.31	61.4	1.65	164.7	0.0	0.79
45344.0	1983 JAN 9.5	0.31	74.0	3.10	177.3	0.0	0.75
45346.0	1983 JAN 11.5	0.31	86.6	4.40	190.0	0.0	0.71
45348.0	1983 JAN 13.5	0.31	99.2	5.48	202.5	0.0	0.69
45350.0	1983 JAN 15.5	0.32	111.4	6.27	214.7	0.0	0.67
45352.0	1983 JAN 17.5	0.32	123.1	6.77	226.4	0.0	0.67
45354.0	1983 JAN 19.5	0.33	134.3	6.99	237.4	0.0	0.67
45356.0	1983 JAN 21.5	0.34	144.8	6.95	247.9	0.0	0.69
45358.0	1983 JAN 23.5	0.36	154.7	6.71	257.7	0.0	0.71
45360.0	1983 JAN 25.5	0.37	163.9	6.30	266.9	0.0	0.74
45362.0	1983 JAN 27.5	0.38	172.6	5.76	275.6	0.0	0.77
45364.0	1983 JAN 29.5	0.39	180.8	5.14	283.7	0.0	0.81
45366.0	1983 FEB 0.5	0.40	188.5	4.46	291.4	0.0	0.84
45368.0	1983 FEB 2.5	0.41	195.7	3.74	298.7	0.0	0.88
45370.0	1983 FEB 4.5	0.42	202.6	3.00	305.6	0.0	0.91
45372.0	1983 FEB 6.5	0.43	209.2	2.25	312.2	0.0	0.95
45374.0	1983 FEB 8.5	0.44	215.5	1.50	318.6	0.0	0.98
45376.0	1983 FEB 10.5	0.45	221.6	0.76	324.7	0.0	1.02
45378.0	1983 FEB 12.5	0.45	227.5	0.04	330.7	0.0	1.05
45380.0	1983 FEB 14.5	0.46	233.3	-0.67	336.5	0.0	1.08
45382.0	1983 FEB 16.5	0.46	239.0	-1.36	342.2	0.0	1.10
45384.0	1983 FEB 18.5	0.46	244.5	-2.02	347.8	0.0	1.13
45386.0	1983 FEB 20.5	0.47	250.1	-2.66	353.4	0.0	1.16
45388.0	1983 FEB 22.5	0.47	255.6	-3.27	358.9	0.0	1.18
45390.0	1983 FEB 24.5	0.47	261.0	-3.85	4.4	0.0	1.20
45392.0	1983 FEB 26.5	0.46	266.6	-4.39	9.9	0.0	1.23
45394.0	1983 MAR 0.5	0.46	272.1	-4.90	15.5	0.0	1.25
45396.0	1983 MAR 2.5	0.46	277.8	-5.37	21.2	0.0	1.27
45398.0	1983 MAR 4.5	0.45	283.6	-5.80	26.9	0.0	1.28
45400.0	1983 MAR 6.5	0.45	289.5	-6.17	32.8	0.0	1.30
45402.0	1983 MAR 8.5	0.44	295.6	-6.49	38.9	0.0	1.31
45404.0	1983 MAR 10.5	0.43	301.9	-6.74	45.2	0.0	1.33
45406.0	1983 MAR 12.5	0.42	308.4	-6.91	51.7	0.0	1.34
45408.0	1983 MAR 14.5	0.42	315.3	-7.00	58.5	0.0	1.35
45410.0	1983 MAR 16.5	0.41	322.5	-6.98	65.6	0.0	1.35
45412.0	1983 MAR 18.5	0.39	330.0	-6.85	73.1	0.0	1.36
45414.0	1983 MAR 20.5	0.38	338.0	-6.59	81.1	0.0	1.36
45416.0	1983 MAR 22.5	0.37	346.5	-6.15	89.5	0.0	1.36
45418.0	1983 MAR 24.5	0.36	355.5	-5.55	98.5	0.0	1.35
45420.0	1983 MAR 26.5	0.35	5.1	-4.77	108.1	0.0	1.35
45422.0	1983 MAR 28.5	0.34	15.3	-3.78	118.3	0.0	1.33
45424.0	1983 MAR 30.5	0.33	26.1	-2.61	129.1	0.0	1.32
45426.0	1983 APR 1.5	0.32	37.4	-1.27	140.5	0.0	1.29
45428.0	1983 APR 3.5	0.31	49.3	0.18	152.5	0.0	1.27
45430.0	1983 APR 5.5	0.31	61.6	1.68	164.9	0.0	1.23
45432.0	1983 APR 7.5	0.31	74.2	3.12	177.5	0.0	1.19
45434.0	1983 APR 9.5	0.31	86.8	4.42	190.2	0.0	1.15
45436.0	1983 APR 11.5	0.31	99.3	5.49	202.7	0.0	1.11
45438.0	1983 APR 13.5	0.32	111.5	6.28	214.9	0.0	1.06
45440.0	1983 APR 15.5	0.32	123.3	6.78	226.5	0.0	1.01
45442.0	1983 APR 17.5	0.33	134.4	6.99	237.6	0.0	0.96
45444.0	1983 APR 19.5	0.34	144.9	6.95	248.1	0.0	0.91
45446.0	1983 APR 21.5	0.36	154.8	6.70	257.9	0.0	0.86
45448.0	1983 APR 23.5	0.37	164.1	6.29	267.1	0.0	0.81
45450.0	1983 APR 25.5	0.38	172.8	5.75	275.7	0.0	0.77
45452.0	1983 APR 27.5	0.39	180.9	5.13	283.8	0.0	0.73
45454.0	1983 APR 29.5	0.40	188.6	4.45	291.5	0.0	0.69
45456.0	1983 MAY 1.5	0.41	195.8	3.73	298.8	0.0	0.66
45458.0	1983 MAY 3.5	0.42	202.7	2.99	305.7	0.0	0.63
45460.0	1983 MAY 5.5	0.43	209.3	2.24	312.3	0.0	0.60
45462.0	1983 MAY 7.5	0.44	215.6	1.49	318.7	0.0	0.58
45464.0	1983 MAY 9.5	0.45	221.7	0.75	324.8	0.0	0.57
45466.0	1983 MAY 11.5	0.45	227.6	0.03	330.8	0.0	0.56
45468.0	1983 MAY 13.5	0.46	233.4	-0.68	336.6	0.0	0.55
45470.0	1983 MAY 15.5	0.46	239.0	-1.37	342.3	0.0	0.55
45472.0	1983 MAY 17.5	0.46	244.6	-2.03	347.9	0.0	0.56
45474.0	1983 MAY 19.5	0.47	250.1	-2.67	353.5	0.0	0.57
45476.0	1983 MAY 21.5	0.47	255.6	-3.28	359.0	0.0	0.58
45478.0	1983 MAY 23.5	0.47	261.1	-3.86	4.5	0.0	0.60
45480.0	1983 MAY 25.5	0.46	266.6	-4.40	10.0	0.0	0.62
45482.0	1983 MAY 27.5	0.46	272.2	-4.91	15.6	0.0	0.64
45484.0	1983 MAY 29.5	0.46	277.9	-5.38	21.3	0.0	0.66
45486.0	1983 JUN 0.5	0.45	283.7	-5.80	27.0	0.0	0.69
45488.0	1983 JUN 2.5	0.45	289.6	-6.18	32.9	0.0	0.72
45490.0	1983 JUN 4.5	0.44	295.7	-6.49	39.0	0.0	0.76
45492.0	1983 JUN 6.5	0.43	302.0	-6.74	45.3	0.0	0.79
45494.0	1983 JUN 8.5	0.42	308.5	-6.91	51.8	0.0	0.82
45496.0	1983 JUN 10.5	0.42	315.4	-7.00	58.6	0.0	0.86
45498.0	1983 JUN 12.5	0.40	322.6	-6.98	65.7	0.0	0.90
45500.0	1983 JUN 14.5	0.39	330.2	-6.84	73.2	0.0	0.94
45502.0	1983 JUN 16.5	0.38	338.2	-6.57	81.2	0.0	0.98
45504.0	1983 JUN 18.5	0.37	346.7	-6.14	89.6	0.0	1.02
45506.0	1983 JUN 20.5	0.36	355.7	-5.54	98.6	0.0	1.06
45508.0	1983 JUN 22.5	0.35	5.3	-4.75	108.2	0.0	1.10
45510.0	1983 JUN 24.5	0.34	15.5	-3.77	118.4	0.0	1.14
45512.0	1983 JUN 26.5	0.33	26.2	-2.59	129.3	0.0	1.18
45514.0	1983 JUN 28.5	0.32	37.6	-1.25	140.7	0.0	1.22
45516.0	1983 JUL 0.5	0.31	49.5	0.20	152.7	0.0	1.25
45518.0	1983 JUL 2.5	0.31	61.8	1.70	165.1	0.0	1.27
45520.0	1983 JUL 4.5	0.31	74.4	3.14	177.7	0.0	1.30
45522.0	1983 JUL 6.5	0.31	87.0	4.44	190.4	0.0	1.31
45524.0	1983 JUL 8.5	0.31	99.5	5.51	202.9	0.0	1.33
45526.0	1983 JUL 10.5	0.32	111.7	6.29	215.1	0.0	1.33
45528.0	1983 JUL 12.5	0.32	123.4	6.79	226.7	0.0	1.33
45530.0	1983 JUL 14.5	0.33	134.6	6.99	237.8	0.0	1.33
45532.0	1983 JUL 16.5	0.34	145.1	6.95	248.2	0.0	1.32
45534.0	1983 JUL 18.5	0.36	155.0	6.70	258.0	0.0	1.31
45536.0	1983 JUL 20.5	0.37	164.2	6.28	267.2	0.0	1.29
45538.0	1983 JUL 22.5	0.38	172.9	5.75	275.8	0.0	1.27
45540.0	1983 JUL 24.5	0.39	181.0	5.12	284.0	0.0	1.26
45542.0	1983 JUL 26.5	0.40	188.7	4.44	291.6	0.0	1.23
45544.0	1983 JUL 28.5	0.41	195.9	3.72	298.9	0.0	1.21
45546.0	1983 JUL 30.5	0.42	202.8	2.98	305.8	0.0	1.19
45548.0	1983 AUG 1.5	0.43	209.4	2.23	312.4	0.0	1.16
45550.0	1983 AUG 3.5	0.44	215.7	1.48	318.8	0.0	1.14
45552.0	1983 AUG 5.5	0.45	221.8	0.74	324.9	0.0	1.11
45554.0	1983 AUG 7.5	0.45	227.7	0.02	330.9	0.0	1.08
45556.0	1983 AUG 9.5	0.46	233.5	-0.69	336.7	0.0	1.06
45558.0	1983 AUG 11.5	0.46	239.1	-1.38	342.4	0.0	1.03
45560.0	1983 AUG 13.5	0.46	244.7	-2.04	348.0	0.0	1.00
45562.0	1983 AUG 15.5	0.47	250.2	-2.68	353.5	0.0	0.97
45564.0	1983 AUG 17.5	0.47	255.7	-3.29	359.1	0.0	0.94
45566.0	1983 AUG 19.5	0.47	261.2	-3.86	4.6	0.0	0.91
45568.0	1983 AUG 21.5	0.46	266.7	-4.41	10.1	0.0	0.88
45570.0	1983 AUG 23.5	0.46	272.3	-4.92	15.7	0.0	0.86
45572.0	1983 AUG 25.5	0.46	278.0	-5.39	21.4	0.0	0.83
45574.0	1983 AUG 27.5	0.45	283.8	-5.81	27.1	0.0	0.80
45576.0	1983 AUG 29.5	0.45	289.7	-6.18	33.0	0.0	0.77
45578.0	1983 SEP 0.5	0.44	295.8	-6.49	39.1	0.0	0.74
45580.0	1983 SEP 2.5	0.43	302.1	-6.74	45.4	0.0	0.72
45582.0	1983 SEP 4.5	0.42	308.7	-6.91	51.9	0.0	0.69
45584.0	1983 SEP 6.5	0.42	315.5	-7.00	58.7	0.0	0.67
45586.0	1983 SEP 8.5	0.40	322.7	-6.98	65.8	0.0	0.66
45588.0	1983 SEP 10.5	0.39	330.3	-6.84	73.4	0.0	0.64
45590.0	1983 SEP 12.5	0.38	338.3	-6.57	81.3	0.0	0.64
45592.0	1983 SEP 14.5	0.37	346.8	-6.14	89.8	0.0	0.64
45594.0	1983 SEP 16.5	0.36	355.8	-5.53	98.8	0.0	0.65
45596.0	1983 SEP 18.5	0.35	5.4	-4.74	108.4	0.0	0.67
45598.0	1983 SEP 20.5	0.34	15.6	-3.75	118.6	0.0	0.69
45600.0	1983 SEP 22.5	0.33	26.4	-2.57	129.4	0.0	0.73
45602.0	1983 SEP 24.5	0.32	37.8	-1.23	140.9	0.0	0.77
45604.0	1983 SEP 26.5	0.31	49.7	0.23	152.9	0.0	0.82
45606.0	1983 SEP 28.5	0.31	62.0	1.72	165.3	0.0	0.88
45608.0	1983 OCT 0.5	0.31	74.6	3.16	177.9	0.0	0.93
45610.0	1983 OCT 2.5	0.31	87.2	4.46	190.6	0.0	0.99
45612.0	1983 OCT 4.5	0.31	99.7	5.52	203.1	0.0	1.04
45614.0	1983 OCT 6.5	0.32	111.9	6.30	215.2	0.0	1.10
45616.0	1983 OCT 8.5	0.33	123.6	6.79	226.9	0.0	1.15
45618.0	1983 OCT 10.5	0.33	134.8	6.99	237.9	0.0	1.19
45620.0	1983 OCT 12.5	0.34	145.3	6.95	248.4	0.0	1.24
45622.0	1983 OCT 14.5	0.36	155.1	6.69	258.2	0.0	1.27
45624.0	1983 OCT 16.5	0.37	164.4	6.27	267.3	0.0	1.30
45626.0	1983 OCT 18.5	0.38	173.0	5.74	276.0	0.0	1.33
45628.0	1983 OCT 20.5	0.39	181.1	5.11	284.1	0.0	1.36
45630.0	1983 OCT 22.5	0.40	188.8	4.43	291.8	0.0	1.38
45632.0	1983 OCT 24.5	0.41	196.0	3.71	299.0	0.0	1.40
45634.0	1983 OCT 26.5	0.42	202.9	2.96	305.9	0.0	1.41
45636.0	1983 OCT 28.5	0.43	209.5	2.22	312.5	0.0	1.42
45638.0	1983 OCT 30.5	0.44	215.8	1.47	318.9	0.0	1.43
45640.0	1983 NOV 1.5	0.45	221.9	0.73	325.0	0.0	1.44
45642.0	1983 NOV 3.5	0.45	227.8	0.01	331.0	0.0	1.44
45644.0	1983 NOV 5.5	0.46	233.6	-0.70	336.8	0.0	1.44
45646.0	1983 NOV 7.5	0.46	239.2	-1.39	342.5	0.0	1.44
45648.0	1983 NOV 9.5	0.46	244.8	-2.05	348.1	0.0	1.44
45650.0	1983 NOV 11.5	0.47	250.3	-2.69	353.6	0.0	1.43
45652.0	1983 NOV 13.5	0.47	255.8	-3.29	359.1	0.0	1.42
45654.0	1983 NOV 15.5	0.47	261.3	-3.87	4.7	0.0	1.41
45656.0	1983 NOV 17.5	0.46	266.8	-4.42	10.2	0.0	1.40
45658.0	1983 NOV 19.5	0.46	272.4	-4.92	15.8	0.0	1.39
45660.0	1983 NOV 21.5	0.46	278.1	-5.39	21.4	0.0	1.37
45662.0	1983 NOV 23.5	0.45	283.8	-5.81	27.2	0.0	1.35
45664.0	1983 NOV 25.5	0.45	289.8	-6.19	33.1	0.0	1.33
45666.0	1983 NOV 27.5	0.44	295.9	-6.50	39.2	0.0	1.31
45668.0	1983 NOV 29.5	0.43	302.2	-6.75	45.5	0.0	1.28
45670.0	1983 DEC 1.5	0.42	308.8	-6.92	52.0	0.0	1.25
45672.0	1983 DEC 3.5	0.41	315.6	-7.00	58.8	0.0	1.22
45674.0	1983 DEC 5.5	0.40	322.8	-6.98	65.9	0.0	1.18
45676.0	1983 DEC 7.5	0.39	330.4	-6.84	73.5	0.0	1.15
45678.0	1983 DEC 9.5	0.38	338.4	-6.56	81.4	0.0	1.11

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

	DATE	MERCURY R	LONG	LAT	RAS	DECS	COIST
45680.0	1983 DEC 11.5	0.37	346.9	-6.13	89.9	0.0	1.06
45682.0	1983 DEC 13.5	0.36	356.0	-5.52	98.9	0.0	1.02
45684.0	1983 DEC 15.5	0.35	5.6	-4.73	108.5	0.0	0.97
45686.0	1983 DEC 17.5	0.34	15.8	-3.73	118.7	0.0	0.92
45688.0	1983 DEC 19.5	0.33	26.6	-2.55	129.6	0.0	0.87
45690.0	1983 DEC 21.5	0.32	38.0	-1.21	141.1	0.0	0.82
45692.0	1983 DEC 23.5	0.31	49.9	0.25	153.1	0.0	0.77
45694.0	1983 DEC 25.5	0.31	62.2	1.74	165.5	0.0	0.73
45696.0	1983 DEC 27.5	0.31	74.8	3.18	178.1	0.0	0.70
45698.0	1983 DEC 29.5	0.31	87.4	4.47	190.8	0.0	0.68
45700.0	1984 JAN 0.5	0.31	99.9	5.53	203.3	0.0	0.67
45702.0	1984 JAN 2.5	0.32	112.1	6.31	215.4	0.0	0.68
45704.0	1984 JAN 4.5	0.33	123.8	6.80	227.1	0.0	0.69
45706.0	1984 JAN 6.5	0.33	134.9	6.99	238.1	0.0	0.72
45708.0	1984 JAN 8.5	0.34	145.4	6.94	248.5	0.0	0.75
45710.0	1984 JAN 10.5	0.36	155.3	6.69	258.3	0.0	0.78
45712.0	1984 JAN 12.5	0.37	164.5	6.27	267.5	0.0	0.82
45714.0	1984 JAN 14.5	0.38	173.1	5.73	276.1	0.0	0.86
45716.0	1984 JAN 16.5	0.39	181.3	5.10	284.2	0.0	0.90
45718.0	1984 JAN 18.5	0.40	188.9	4.42	291.9	0.0	0.94
45720.0	1984 JAN 20.5	0.41	196.1	3.69	299.1	0.0	0.98
45722.0	1984 JAN 22.5	0.42	203.0	2.95	306.0	0.0	1.01
45724.0	1984 JAN 24.5	0.43	209.6	2.20	312.6	0.0	1.05
45726.0	1984 JAN 26.5	0.44	215.9	1.46	319.0	0.0	1.08
45728.0	1984 JAN 28.5	0.45	222.0	0.72	325.1	0.0	1.11
45730.0	1984 JAN 30.5	0.45	227.9	-0.00	331.1	0.0	1.14
45732.0	1984 FEB 1.5	0.46	233.7	-0.71	336.9	0.0	1.17
45734.0	1984 FEB 3.5	0.46	239.3	-1.40	342.6	0.0	1.20
45736.0	1984 FEB 5.5	0.46	244.9	-2.06	348.2	0.0	1.22
45738.0	1984 FEB 7.5	0.47	250.4	-2.70	353.7	0.0	1.24
45740.0	1984 FEB 9.5	0.47	255.9	-3.30	359.2	0.0	1.26
45742.0	1984 FEB 11.5	0.47	261.4	-3.88	4.7	0.0	1.28
45744.0	1984 FEB 13.5	0.46	266.9	-4.43	10.3	0.0	1.30
45746.0	1984 FEB 15.5	0.46	272.5	-4.93	15.9	0.0	1.32
45748.0	1984 FEB 17.5	0.46	278.1	-5.40	21.5	0.0	1.33
45750.0	1984 FEB 19.5	0.45	283.9	-5.82	27.3	0.0	1.34
45752.0	1984 FEB 21.5	0.45	289.9	-6.19	33.2	0.0	1.35
45754.0	1984 FEB 23.5	0.44	296.0	-6.50	39.3	0.0	1.36
45756.0	1984 FEB 25.5	0.43	302.3	-6.75	45.6	0.0	1.37
45758.0	1984 FEB 27.5	0.42	308.9	-6.92	52.1	0.0	1.38
45760.0	1984 MAR 0.5	0.41	315.7	-7.00	58.9	0.0	1.38
45762.0	1984 MAR 2.5	0.40	322.9	-6.98	66.1	0.0	1.38
45764.0	1984 MAR 4.5	0.39	330.5	-6.84	73.6	0.0	1.38
45766.0	1984 MAR 6.5	0.38	338.5	-6.56	81.6	0.0	1.37
45768.0	1984 MAR 8.5	0.37	347.1	-6.12	90.0	0.0	1.36
45770.0	1984 MAR 10.5	0.36	356.1	-5.51	99.1	0.0	1.35
45772.0	1984 MAR 12.5	0.35	5.7	-4.71	108.7	0.0	1.33
45774.0	1984 MAR 14.5	0.34	15.9	-3.72	118.9	0.0	1.31
45776.0	1984 MAR 16.5	0.33	26.8	-2.53	129.8	0.0	1.29
45778.0	1984 MAR 18.5	0.32	38.2	-1.19	141.3	0.0	1.26
45780.0	1984 MAR 20.5	0.31	50.1	0.28	153.3	0.0	1.22
45782.0	1984 MAR 22.5	0.31	62.4	1.77	165.7	0.0	1.18
45784.0	1984 MAR 24.5	0.31	75.0	3.21	178.3	0.0	1.13
45786.0	1984 MAR 26.5	0.31	87.6	4.49	191.0	0.0	1.08
45788.0	1984 MAR 28.5	0.31	100.1	5.55	203.5	0.0	1.03
45790.0	1984 MAR 30.5	0.32	112.3	6.32	215.6	0.0	0.98
45792.0	1984 APR 1.5	0.33	124.0	6.80	227.3	0.0	0.93
45794.0	1984 APR 3.5	0.33	135.1	7.00	238.3	0.0	0.87
45796.0	1984 APR 5.5	0.34	145.6	6.94	248.7	0.0	0.82
45798.0	1984 APR 7.5	0.36	155.4	6.68	258.5	0.0	0.78
45800.0	1984 APR 9.5	0.37	164.6	6.26	267.6	0.0	0.73
45802.0	1984 APR 11.5	0.38	173.3	5.72	276.2	0.0	0.69
45804.0	1984 APR 13.5	0.39	181.4	5.09	284.3	0.0	0.66
45806.0	1984 APR 15.5	0.40	189.0	4.40	292.0	0.0	0.63
45808.0	1984 APR 17.5	0.41	196.3	3.68	299.2	0.0	0.61
45810.0	1984 APR 19.5	0.42	203.1	2.94	306.1	0.0	0.59
45812.0	1984 APR 21.5	0.43	209.7	2.19	312.7	0.0	0.58
45814.0	1984 APR 23.5	0.44	216.0	1.45	319.1	0.0	0.57
45816.0	1984 APR 25.5	0.45	222.1	0.71	325.2	0.0	0.57
45818.0	1984 APR 27.5	0.45	228.0	-0.02	331.2	0.0	0.57
45820.0	1984 APR 29.5	0.46	233.8	-0.72	337.0	0.0	0.58
45822.0	1984 MAY 1.5	0.45	239.4	-1.41	342.7	0.0	0.59
45824.0	1984 MAY 3.5	0.46	245.0	-2.07	348.3	0.0	0.60
45826.0	1984 MAY 5.5	0.47	250.5	-2.71	353.8	0.0	0.62
45828.0	1984 MAY 7.5	0.47	256.0	-3.31	359.3	0.0	0.64
45830.0	1984 MAY 9.5	0.47	261.5	-3.89	4.8	0.0	0.67
45832.0	1984 MAY 11.5	0.46	267.0	-4.43	10.4	0.0	0.69
45834.0	1984 MAY 13.5	0.46	272.6	-4.94	16.0	0.0	0.72
45836.0	1984 MAY 15.5	0.46	278.2	-5.41	21.6	0.0	0.75
45838.0	1984 MAY 17.5	0.45	284.0	-5.83	27.4	0.0	0.78
45840.0	1984 MAY 19.5	0.45	290.0	-6.20	33.3	0.0	0.82
45842.0	1984 MAY 21.5	0.44	296.1	-6.51	39.4	0.0	0.85
45844.0	1984 MAY 23.5	0.43	302.4	-6.75	45.7	0.0	0.88
45846.0	1984 MAY 25.5	0.42	309.0	-6.92	52.2	0.0	0.92
45848.0	1984 MAY 27.5	0.41	315.8	-7.00	59.0	0.0	0.95
45850.0	1984 MAY 29.5	0.40	323.1	-6.98	66.2	0.0	0.99
45852.0	1984 JUN 0.5	0.39	330.7	-6.83	73.7	0.0	1.03
45854.0	1984 JUN 2.5	0.39	338.7	-6.55	81.7	0.0	1.06
45856.0	1984 JUN 4.5	0.37	347.2	-6.11	90.2	0.0	1.10
45858.0	1984 JUN 6.5	0.36	356.3	-5.50	99.2	0.0	1.14
45860.0	1984 JUN 8.5	0.35	5.9	-4.70	108.8	0.0	1.17
45862.0	1984 JUN 10.5	0.34	16.1	-3.70	119.1	0.0	1.20
45864.0	1984 JUN 12.5	0.33	27.0	-2.51	130.0	0.0	1.24
45866.0	1984 JUN 14.5	0.32	38.4	-1.16	141.5	0.0	1.26
45868.0	1984 JUN 16.5	0.31	50.3	0.30	153.5	0.0	1.29
45870.0	1984 JUN 18.5	0.31	62.6	1.79	165.9	0.0	1.30
45872.0	1984 JUN 20.5	0.31	75.2	3.23	178.5	0.0	1.32
45874.0	1984 JUN 22.5	0.31	87.8	4.51	191.2	0.0	1.32
45876.0	1984 JUN 24.5	0.31	100.3	5.56	203.7	0.0	1.33
45878.0	1984 JUN 26.5	0.32	112.5	6.33	215.8	0.0	1.32
45880.0	1984 JUN 28.5	0.33	124.1	6.81	227.4	0.0	1.31
45882.0	1984 JUL 0.5	0.33	135.2	7.00	238.4	0.0	1.30
45884.0	1984 JUL 2.5	0.35	145.7	6.94	248.8	0.0	1.28
45886.0	1984 JUL 4.5	0.36	155.6	6.68	258.6	0.0	1.26
45888.0	1984 JUL 6.5	0.37	164.8	6.25	267.8	0.0	1.24
45890.0	1984 JUL 8.5	0.38	173.4	5.71	276.4	0.0	1.21
45892.0	1984 JUL 10.5	0.39	181.5	5.08	284.5	0.0	1.19
45894.0	1984 JUL 12.5	0.40	189.1	4.39	292.1	0.0	1.16
45896.0	1984 JUL 14.5	0.41	196.4	3.67	299.3	0.0	1.13
45898.0	1984 JUL 16.5	0.42	203.2	2.93	306.2	0.0	1.10
45900.0	1984 JUL 18.5	0.43	209.8	2.18	312.8	0.0	1.08
45902.0	1984 JUL 20.5	0.44	216.1	1.43	319.2	0.0	1.05
45904.0	1984 JUL 22.5	0.45	222.2	0.70	325.3	0.0	1.02
45906.0	1984 JUL 24.5	0.45	228.1	-0.03	331.2	0.0	0.99
45908.0	1984 JUL 26.5	0.46	233.8	-0.73	337.0	0.0	0.96
45910.0	1984 JUL 28.5	0.46	239.5	-1.42	342.7	0.0	0.93
45912.0	1984 JUL 30.5	0.46	245.0	-2.08	348.3	0.0	0.90
45914.0	1984 AUG 1.5	0.47	250.6	-2.71	353.9	0.0	0.87
45916.0	1984 AUG 3.5	0.47	256.1	-3.32	359.4	0.0	0.84
45918.0	1984 AUG 5.5	0.47	261.5	-3.90	4.9	0.0	0.81
45920.0	1984 AUG 7.5	0.46	267.1	-4.44	10.4	0.0	0.78
45922.0	1984 AUG 9.5	0.46	272.7	-4.95	16.0	0.0	0.76
45924.0	1984 AUG 11.5	0.46	278.3	-5.41	21.7	0.0	0.73
45926.0	1984 AUG 13.5	0.45	284.1	-5.83	27.5	0.0	0.70
45928.0	1984 AUG 15.5	0.45	290.0	-6.20	33.4	0.0	0.68
45930.0	1984 AUG 17.5	0.44	296.2	-6.51	39.5	0.0	0.66
45932.0	1984 AUG 19.5	0.43	302.5	-6.76	45.8	0.0	0.64
45934.0	1984 AUG 21.5	0.42	309.1	-6.92	52.3	0.0	0.63
45936.0	1984 AUG 23.5	0.41	315.9	-7.00	59.1	0.0	0.62
45938.0	1984 AUG 25.5	0.40	323.2	-6.97	66.3	0.0	0.62
45940.0	1984 AUG 27.5	0.39	330.8	-6.83	73.8	0.0	0.62
45942.0	1984 AUG 29.5	0.38	338.8	-6.55	81.8	0.0	0.63
45944.0	1984 SEP 0.5	0.37	347.3	-6.10	90.3	0.0	0.65
45946.0	1984 SEP 2.5	0.36	356.4	-5.49	99.4	0.0	0.68
45948.0	1984 SEP 4.5	0.35	6.0	-4.68	109.0	0.0	0.71
45950.0	1984 SEP 6.5	0.34	16.3	-3.68	119.2	0.0	0.75
45952.0	1984 SEP 8.5	0.33	27.1	-2.49	130.1	0.0	0.79
45954.0	1984 SEP 10.5	0.32	38.5	-1.14	141.6	0.0	0.84
45956.0	1984 SEP 12.5	0.31	50.5	0.32	153.6	0.0	0.90
45958.0	1984 SEP 14.5	0.31	62.9	1.81	166.1	0.0	0.95
45960.0	1984 SEP 16.5	0.31	75.4	3.25	178.7	0.0	1.01
45962.0	1984 SEP 18.5	0.31	88.0	4.53	191.4	0.0	1.06
45964.0	1984 SEP 20.5	0.31	100.5	5.58	203.9	0.0	1.12
45966.0	1984 SEP 22.5	0.32	112.6	6.34	216.0	0.0	1.17
45968.0	1984 SEP 24.5	0.33	124.3	6.81	227.6	0.0	1.21
45970.0	1984 SEP 26.5	0.33	135.4	7.00	238.6	0.0	1.25
45972.0	1984 SEP 28.5	0.35	145.9	6.94	249.0	0.0	1.29
45974.0	1984 OCT 0.5	0.36	155.7	6.67	258.7	0.0	1.32
45976.0	1984 OCT 2.5	0.37	164.9	6.24	267.9	0.0	1.34
45978.0	1984 OCT 4.5	0.38	173.5	5.70	276.5	0.0	1.37
45980.0	1984 OCT 6.5	0.39	181.6	5.07	284.6	0.0	1.38
45982.0	1984 OCT 8.5	0.40	189.3	4.38	292.2	0.0	1.40
45984.0	1984 OCT 10.5	0.41	196.5	3.66	299.5	0.0	1.41
45986.0	1984 OCT 12.5	0.42	203.3	2.92	306.3	0.0	1.42
45988.0	1984 OCT 14.5	0.43	209.9	2.17	312.9	0.0	1.42
45990.0	1984 OCT 16.5	0.44	216.2	1.42	319.3	0.0	1.43
45992.0	1984 OCT 18.5	0.45	222.3	0.69	325.4	0.0	1.43
45994.0	1984 OCT 20.5	0.45	228.2	-0.04	331.3	0.0	1.43
45996.0	1984 OCT 22.5	0.46	233.9	-0.74	337.1	0.0	1.42
45998.0	1984 OCT 24.5	0.46	239.6	-1.43	342.8	0.0	1.42
46000.0	1984 OCT 26.5	0.46	245.1	-2.09	348.4	0.0	1.41
46002.0	1984 OCT 28.5	0.47	250.6	-2.72	354.0	0.0	1.40
46004.0	1984 OCT 30.5	0.47	256.1	-3.33	359.5	0.0	1.39
46006.0	1984 NOV 1.5	0.47	261.6	-3.91	5.0	0.0	1.37
46008.0	1984 NOV 3.5	0.46	267.2	-4.45	10.5	0.0	1.35
46010.0	1984 NOV 5.5	0.46	272.7	-4.96	16.1	0.0	1.34
46012.0	1984 NOV 7.5	0.46	278.4	-5.42	21.8	0.0	1.32
46014.0	1984 NOV 9.5	0.45	284.2	-5.84	27.6	0.0	1.29
46016.0	1984 NOV 11.5	0.45	290.1	-6.21	33.5	0.0	1.27
46018.0	1984 NOV 13.5	0.44	296.3	-6.52	39.6	0.0	1.24

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST
46020.0	1984 NOV 15.5	0.43	302.6	-6.76	45.9	0.0	1.21
46022.0	1984 NOV 17.5	0.42	309.2	-6.92	52.4	0.0	1.18
46024.0	1984 NOV 19.5	0.41	316.1	-7.00	59.2	0.0	1.14
46026.0	1984 NOV 21.5	0.40	323.3	-6.97	66.4	0.0	1.10
46028.0	1984 NOV 23.5	0.39	330.9	-6.83	74.0	0.0	1.06
46030.0	1984 NOV 25.5	0.38	338.9	-6.54	82.0	0.0	1.02
46032.0	1984 NOV 27.5	0.37	347.5	-6.10	90.5	0.0	0.98
46034.0	1984 NOV 29.5	0.36	356.5	-5.48	99.5	0.0	0.93
46036.0	1984 DEC 1.5	0.35	6.2	-4.67	109.1	0.0	0.88
46038.0	1984 DEC 3.5	0.34	16.4	-3.67	119.4	0.0	0.84
46040.0	1984 DEC 5.5	0.33	27.3	-2.47	130.3	0.0	0.79
46042.0	1984 DEC 7.5	0.32	38.7	-1.12	141.8	0.0	0.75
46044.0	1984 DEC 9.5	0.31	50.6	0.34	153.8	0.0	0.72
46046.0	1984 DEC 11.5	0.31	63.0	1.84	166.3	0.0	0.69
46048.0	1984 DEC 13.5	0.31	75.6	3.27	178.9	0.0	0.68
46050.0	1984 DEC 15.5	0.31	88.2	4.55	191.6	0.0	0.68
46052.0	1984 DEC 17.5	0.31	100.7	5.59	204.1	0.0	0.69
46054.0	1984 DEC 19.5	0.32	112.8	6.35	216.2	0.0	0.71
46056.0	1984 DEC 21.5	0.33	124.5	6.82	227.8	0.0	0.74
46058.0	1984 DEC 23.5	0.34	135.6	7.00	238.8	0.0	0.78
46060.0	1984 DEC 25.5	0.35	146.0	6.93	249.1	0.0	0.82
46062.0	1984 DEC 27.5	0.36	155.9	6.66	258.9	0.0	0.87
46064.0	1984 DEC 29.5	0.37	165.0	6.24	268.0	0.0	0.91
46066.0	1985 JAN 0.5	0.38	173.7	5.69	276.6	0.0	0.95
46068.0	1985 JAN 2.5	0.39	181.7	5.06	284.7	0.0	0.99
46070.0	1985 JAN 4.5	0.40	189.4	4.37	292.3	0.0	1.03
46072.0	1985 JAN 6.5	0.41	196.6	3.65	299.6	0.0	1.07
46074.0	1985 JAN 8.5	0.42	203.4	2.91	306.4	0.0	1.11
46076.0	1985 JAN 10.5	0.43	210.0	2.16	313.0	0.0	1.14
46078.0	1985 JAN 12.5	0.44	216.3	1.41	319.4	0.0	1.17
46080.0	1985 JAN 14.5	0.45	222.4	0.67	325.5	0.0	1.20
46082.0	1985 JAN 16.5	0.45	228.3	-0.05	331.4	0.0	1.23
46084.0	1985 JAN 18.5	0.46	234.0	-0.75	337.2	0.0	1.25
46086.0	1985 JAN 20.5	0.46	239.7	-1.44	342.9	0.0	1.28
46088.0	1985 JAN 22.5	0.46	245.2	-2.10	348.5	0.0	1.30
46090.0	1985 JAN 24.5	0.47	250.7	-2.73	354.1	0.0	1.32
46092.0	1985 JAN 26.5	0.47	256.2	-3.34	359.6	0.0	1.33
46094.0	1985 JAN 28.5	0.47	261.7	-3.92	5.1	0.0	1.35
46096.0	1985 JAN 30.5	0.46	267.2	-4.46	10.6	0.0	1.36
46098.0	1985 FEB 1.5	0.46	272.8	-4.96	16.2	0.0	1.37
46100.0	1985 FEB 3.5	0.46	278.5	-5.43	21.9	0.0	1.38
46102.0	1985 FEB 5.5	0.45	284.3	-5.85	27.7	0.0	1.39
46104.0	1985 FEB 7.5	0.45	290.2	-6.21	33.6	0.0	1.40
46106.0	1985 FEB 9.5	0.44	296.3	-6.52	39.7	0.0	1.40
46108.0	1985 FEB 11.5	0.43	302.7	-6.76	46.0	0.0	1.40
46110.0	1985 FEB 13.5	0.42	309.3	-6.93	52.5	0.0	1.40
46112.0	1985 FEB 15.5	0.41	316.2	-7.00	59.3	0.0	1.40
46114.0	1985 FEB 17.5	0.40	323.4	-6.97	66.5	0.0	1.39
46116.0	1985 FEB 19.5	0.39	331.0	-6.82	74.1	0.0	1.38
46118.0	1985 FEB 21.5	0.38	339.1	-6.53	82.1	0.0	1.37
46120.0	1985 FEB 23.5	0.37	347.6	-6.09	90.6	0.0	1.35
46122.0	1985 FEB 25.5	0.36	356.7	-5.47	99.6	0.0	1.33
46124.0	1985 FEB 27.5	0.35	6.3	-4.66	109.3	0.0	1.31
46126.0	1985 MAR 1.5	0.34	16.6	-3.65	119.6	0.0	1.28
46128.0	1985 MAR 3.5	0.33	27.5	-2.45	130.5	0.0	1.24
46130.0	1985 MAR 5.5	0.32	38.9	-1.10	142.0	0.0	1.21
46132.0	1985 MAR 7.5	0.31	50.8	0.37	154.0	0.0	1.16
46134.0	1985 MAR 9.5	0.31	63.2	1.86	166.5	0.0	1.12
46136.0	1985 MAR 11.5	0.31	75.8	3.29	179.1	0.0	1.06
46138.0	1985 MAR 13.5	0.31	88.4	4.57	191.8	0.0	1.01
46140.0	1985 MAR 15.5	0.31	100.9	5.61	204.2	0.0	0.96
46142.0	1985 MAR 17.5	0.32	113.0	6.36	216.3	0.0	0.90
46144.0	1985 MAR 19.5	0.33	124.7	6.82	227.9	0.0	0.85
46146.0	1985 MAR 21.5	0.34	135.8	7.00	238.9	0.0	0.80
46148.0	1985 MAR 23.5	0.35	146.2	6.93	249.3	0.0	0.75
46150.0	1985 MAR 25.5	0.36	156.0	6.66	259.0	0.0	0.71
46152.0	1985 MAR 27.5	0.37	165.2	6.23	268.2	0.0	0.67
46154.0	1985 MAR 29.5	0.38	173.8	5.68	276.8	0.0	0.64
46156.0	1985 APR 0.5	0.39	181.9	5.05	284.8	0.0	0.62
46158.0	1985 APR 2.5	0.40	189.5	4.36	292.4	0.0	0.60
46160.0	1985 APR 4.5	0.41	196.7	3.64	299.7	0.0	0.59
46162.0	1985 APR 6.5	0.42	203.5	2.90	306.6	0.0	0.59
46164.0	1985 APR 8.5	0.43	210.1	2.15	313.1	0.0	0.59
46166.0	1985 APR 10.5	0.44	216.4	1.40	319.5	0.0	0.59
46168.0	1985 APR 12.5	0.45	222.5	0.66	325.6	0.0	0.60
46170.0	1985 APR 14.5	0.45	228.3	-0.06	331.5	0.0	0.62
46172.0	1985 APR 16.5	0.46	234.1	-0.77	337.3	0.0	0.64
46174.0	1985 APR 18.5	0.46	239.7	-1.45	343.0	0.0	0.66
46176.0	1985 APR 20.5	0.46	245.3	-2.11	348.6	0.0	0.68
46178.0	1985 APR 22.5	0.47	250.8	-2.74	354.1	0.0	0.71
46180.0	1985 APR 24.5	0.47	256.3	-3.35	359.7	0.0	0.73
46182.0	1985 APR 26.5	0.47	261.8	-3.92	5.2	0.0	0.76
46184.0	1985 APR 28.5	0.46	267.3	-4.47	10.7	0.0	0.79
46186.0	1985 MAY 0.5	0.46	272.9	-4.97	16.3	0.0	0.82
46188.0	1985 MAY 2.5	0.46	278.6	-5.43	22.0	0.0	0.85

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST
46190.0	1985 MAY 4.5	0.45	284.4	-5.85	27.7	0.0	0.88
46192.0	1985 MAY 6.5	0.45	290.3	-6.22	33.7	0.0	0.91
46194.0	1985 MAY 8.5	0.44	296.4	-6.52	39.8	0.0	0.95
46196.0	1985 MAY 10.5	0.43	302.8	-6.77	46.1	0.0	0.98
46198.0	1985 MAY 12.5	0.42	309.4	-6.93	52.6	0.0	1.01
46200.0	1985 MAY 14.5	0.41	316.3	-7.00	59.5	0.0	1.04
46202.0	1985 MAY 16.5	0.40	323.5	-6.97	66.6	0.0	1.08
46204.0	1985 MAY 18.5	0.39	331.1	-6.82	74.2	0.0	1.11
46206.0	1985 MAY 20.5	0.38	339.2	-6.53	82.2	0.0	1.14
46208.0	1985 MAY 22.5	0.37	347.7	-6.08	90.7	0.0	1.17
46210.0	1985 MAY 24.5	0.36	356.8	-5.46	99.8	0.0	1.20
46212.0	1985 MAY 26.5	0.35	6.5	-4.64	109.4	0.0	1.23
46214.0	1985 MAY 28.5	0.34	16.8	-3.63	119.7	0.0	1.26
46216.0	1985 MAY 30.5	0.33	27.6	-2.43	130.7	0.0	1.28
46218.0	1985 JUN 1.5	0.32	39.1	-1.08	142.2	0.0	1.30
46220.0	1985 JUN 3.5	0.31	51.0	0.39	154.2	0.0	1.31
46222.0	1985 JUN 5.5	0.31	63.4	1.88	166.7	0.0	1.32
46224.0	1985 JUN 7.5	0.31	76.0	3.31	179.3	0.0	1.32
46226.0	1985 JUN 9.5	0.31	88.6	4.58	192.0	0.0	1.32
46228.0	1985 JUN 11.5	0.31	101.1	5.62	204.4	0.0	1.31
46230.0	1985 JUN 13.5	0.32	113.2	6.37	216.5	0.0	1.30
46232.0	1985 JUN 15.5	0.33	124.9	6.83	228.1	0.0	1.28
46234.0	1985 JUN 17.5	0.34	135.9	7.00	239.1	0.0	1.26
46236.0	1985 JUN 19.5	0.35	146.4	6.93	249.5	0.0	1.23
46238.0	1985 JUN 21.5	0.36	156.1	6.65	259.2	0.0	1.20
46240.0	1985 JUN 23.5	0.37	165.3	6.22	268.3	0.0	1.17
46242.0	1985 JUN 25.5	0.38	173.9	5.67	276.9	0.0	1.14
46244.0	1985 JUN 27.5	0.39	182.0	5.04	284.9	0.0	1.11
46246.0	1985 JUN 29.5	0.40	189.6	4.35	292.6	0.0	1.08
46248.0	1985 JUL 1.5	0.41	196.8	3.63	299.8	0.0	1.05
46250.0	1985 JUL 3.5	0.42	203.7	2.88	306.7	0.0	1.01
46252.0	1985 JUL 5.5	0.43	210.2	2.13	313.2	0.0	0.98
46254.0	1985 JUL 7.5	0.44	216.5	1.39	319.6	0.0	0.95
46256.0	1985 JUL 9.5	0.45	222.5	0.65	325.7	0.0	0.92
46258.0	1985 JUL 11.5	0.45	228.4	-0.07	331.6	0.0	0.88
46260.0	1985 JUL 13.5	0.46	234.2	-0.78	337.4	0.0	0.85
46262.0	1985 JUL 15.5	0.46	239.8	-1.46	343.1	0.0	0.82
46264.0	1985 JUL 17.5	0.46	245.4	-2.12	348.7	0.0	0.79
46266.0	1985 JUL 19.5	0.47	250.9	-2.75	354.2	0.0	0.77
46268.0	1985 JUL 21.5	0.47	256.4	-3.36	359.7	0.0	0.74
46270.0	1985 JUL 23.5	0.47	261.9	-3.93	5.3	0.0	0.71
46272.0	1985 JUL 25.5	0.46	267.4	-4.47	10.8	0.0	0.69
46274.0	1985 JUL 27.5	0.46	273.0	-4.98	16.4	0.0	0.67
46276.0	1985 JUL 29.5	0.46	278.7	-5.44	22.1	0.0	0.65
46278.0	1985 AUG 0.5	0.45	284.5	-5.86	27.8	0.0	0.63
46280.0	1985 AUG 2.5	0.45	290.4	-6.22	33.8	0.0	0.62
46282.0	1985 AUG 4.5	0.44	296.5	-6.53	39.9	0.0	0.61
46284.0	1985 AUG 6.5	0.43	302.9	-6.77	46.2	0.0	0.60
46286.0	1985 AUG 8.5	0.42	309.5	-6.93	52.7	0.0	0.60
46288.0	1985 AUG 10.5	0.41	316.4	-7.00	59.6	0.0	0.61
46290.0	1985 AUG 12.5	0.40	323.6	-6.97	66.7	0.0	0.62
46292.0	1985 AUG 14.5	0.39	331.3	-6.82	74.3	0.0	0.63
46294.0	1985 AUG 16.5	0.38	339.3	-6.52	82.3	0.0	0.66
46296.0	1985 AUG 18.5	0.37	347.9	-6.07	90.9	0.0	0.69
46298.0	1985 AUG 20.5	0.36	357.0	-5.44	99.9	0.0	0.73
46300.0	1985 AUG 22.5	0.35	6.6	-4.63	109.6	0.0	0.77
46302.0	1985 AUG 24.5	0.34	16.9	-3.61	119.9	0.0	0.81
46304.0	1985 AUG 26.5	0.33	27.8	-2.41	130.8	0.0	0.87
46306.0	1985 AUG 28.5	0.32	39.3	-1.05	142.4	0.0	0.92
46308.0	1985 AUG 30.5	0.31	51.2	0.41	154.4	0.0	0.97
46310.0	1985 SEP 1.5	0.31	63.6	1.91	166.9	0.0	1.03
46312.0	1985 SEP 3.5	0.31	76.2	3.33	179.5	0.0	1.08
46314.0	1985 SEP 5.5	0.31	88.8	4.60	192.2	0.0	1.13
46316.0	1985 SEP 7.5	0.31	101.3	5.63	204.6	0.0	1.18
46318.0	1985 SEP 9.5	0.32	113.4	6.38	216.7	0.0	1.22
46320.0	1985 SEP 11.5	0.33	125.0	6.83	228.3	0.0	1.26
46322.0	1985 SEP 13.5	0.34	136.1	7.00	239.3	0.0	1.30
46324.0	1985 SEP 15.5	0.35	146.5	6.92	249.6	0.0	1.32
46326.0	1985 SEP 17.5	0.36	156.3	6.65	259.3	0.0	1.35
46328.0	1985 SEP 19.5	0.37	165.5	6.21	268.4	0.0	1.37
46330.0	1985 SEP 21.5	0.38	174.0	5.66	277.0	0.0	1.38
46332.0	1985 SEP 23.5	0.39	182.1	5.03	285.1	0.0	1.39
46334.0	1985 SEP 25.5	0.40	189.7	4.34	292.7	0.0	1.40
46336.0	1985 SEP 27.5	0.41	196.9	3.61	299.9	0.0	1.41
46338.0	1985 SEP 29.5	0.42	203.8	2.87	306.8	0.0	1.41
46340.0	1985 OCT 1.5	0.43	210.3	2.12	313.3	0.0	1.41
46342.0	1985 OCT 3.5	0.44	216.6	1.38	319.7	0.0	1.41
46344.0	1985 OCT 5.5	0.45	222.6	0.64	325.8	0.0	1.40
46346.0	1985 OCT 7.5	0.45	228.5	-0.08	331.7	0.0	1.40
46348.0	1985 OCT 9.5	0.46	234.3	-0.79	337.5	0.0	1.39
46350.0	1985 OCT 11.5	0.46	239.9	-1.47	343.2	0.0	1.38
46352.0	1985 OCT 13.5	0.46	245.5	-2.13	348.8	0.0	1.36
46354.0	1985 OCT 15.5	0.47	251.0	-2.76	354.3	0.0	1.35
46356.0	1985 OCT 17.5	0.47	256.5	-3.37	359.8	0.0	1.33
46358.0	1985 OCT 19.5	0.47	262.0	-3.94	5.3	0.0	1.31

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST
46360.0	1985 OCT 21.5	0.46	267.5	-4.48	10.9	0.0	1.29
46362.0	1985 OCT 23.5	0.46	272.1	-4.99	16.5	0.0	1.27
46364.0	1985 OCT 25.5	0.46	278.8	-5.45	22.1	0.0	1.25
46366.0	1985 OCT 27.5	0.45	284.6	-5.86	27.9	0.0	1.22
46368.0	1985 OCT 29.5	0.45	290.5	-6.23	33.9	0.0	1.19
46370.0	1985 NOV 0.5	0.44	296.6	-6.53	40.0	0.0	1.16
46372.0	1985 NOV 2.5	0.43	303.0	-6.77	46.3	0.0	1.13
46374.0	1985 NOV 4.5	0.42	309.6	-6.93	52.8	0.0	1.09
46376.0	1985 NOV 6.5	0.41	316.5	-7.00	59.7	0.0	1.06
46378.0	1985 NOV 8.5	0.40	323.7	-6.97	66.9	0.0	1.02
46380.0	1985 NOV 10.5	0.39	331.4	-6.81	74.4	0.0	0.98
46382.0	1985 NOV 12.5	0.38	339.5	-6.52	82.5	0.0	0.93
46384.0	1985 NOV 14.5	0.37	348.0	-6.06	91.0	0.0	0.89
46386.0	1985 NOV 16.5	0.36	357.1	-5.43	100.1	0.0	0.85
46388.0	1985 NOV 18.5	0.35	6.8	-4.61	109.8	0.0	0.81
46390.0	1985 NOV 20.5	0.34	17.1	-3.60	120.1	0.0	0.77
46392.0	1985 NOV 22.5	0.33	28.0	-2.39	131.0	0.0	0.73
46394.0	1985 NOV 24.5	0.32	39.4	-1.03	142.5	0.0	0.70
46396.0	1985 NOV 26.5	0.31	51.4	0.44	154.6	0.0	0.68
46398.0	1985 NOV 28.5	0.31	63.8	1.93	167.0	0.0	0.68
46400.0	1985 DEC 0.5	0.31	76.4	3.35	179.7	0.0	0.68
46402.0	1985 DEC 2.5	0.31	89.0	4.62	192.4	0.0	0.70
46404.0	1985 DEC 4.5	0.31	101.5	5.65	204.8	0.0	0.73
46406.0	1985 DEC 6.5	0.32	113.6	6.39	216.9	0.0	0.77
46408.0	1985 DEC 8.5	0.33	125.2	6.84	228.5	0.0	0.81
46410.0	1985 DEC 10.5	0.34	136.3	7.00	239.4	0.0	0.86
46412.0	1985 DEC 12.5	0.35	146.7	6.92	249.8	0.0	0.91
46414.0	1985 DEC 14.5	0.36	156.4	6.64	259.5	0.0	0.95
46416.0	1985 DEC 16.5	0.37	165.6	6.21	268.6	0.0	1.00
46418.0	1985 DEC 18.5	0.38	174.2	5.65	277.1	0.0	1.04
46420.0	1985 DEC 20.5	0.39	182.2	5.02	285.2	0.0	1.08
46422.0	1985 DEC 22.5	0.40	189.8	4.33	292.8	0.0	1.12
46424.0	1985 DEC 24.5	0.41	197.0	3.60	300.0	0.0	1.16
46426.0	1985 DEC 26.5	0.42	203.9	2.86	306.9	0.0	1.19
46428.0	1985 DEC 28.5	0.43	210.4	2.11	313.4	0.0	1.22
46430.0	1985 DEC 30.5	0.44	216.7	1.37	319.8	0.0	1.25
46432.0	1986 JAN 1.5	0.45	222.7	0.63	325.9	0.0	1.28
46434.0	1986 JAN 3.5	0.45	228.6	-0.09	331.8	0.0	1.30
46436.0	1986 JAN 5.5	0.46	234.4	-0.80	337.6	0.0	1.32
46438.0	1986 JAN 7.5	0.46	240.0	-1.48	343.3	0.0	1.34
46440.0	1986 JAN 9.5	0.46	245.6	-2.14	348.9	0.0	1.36
46442.0	1986 JAN 11.5	0.47	251.1	-2.77	354.4	0.0	1.37
46444.0	1986 JAN 13.5	0.47	256.6	-3.38	359.9	0.0	1.39
46446.0	1986 JAN 15.5	0.47	262.1	-3.95	5.4	0.0	1.40
46448.0	1986 JAN 17.5	0.46	267.6	-4.49	11.0	0.0	1.41
46450.0	1986 JAN 19.5	0.46	273.2	-4.99	16.6	0.0	1.41
46452.0	1986 JAN 21.5	0.46	278.9	-5.45	22.2	0.0	1.42
46454.0	1986 JAN 23.5	0.45	284.7	-5.87	28.0	0.0	1.42
46456.0	1986 JAN 25.5	0.45	290.6	-6.23	33.9	0.0	1.42
46458.0	1986 JAN 27.5	0.44	296.7	-6.54	40.1	0.0	1.42
46460.0	1986 JAN 29.5	0.43	303.1	-6.77	46.4	0.0	1.41
46462.0	1986 FEB 0.5	0.42	309.7	-6.93	52.9	0.0	1.41
46464.0	1986 FEB 2.5	0.41	316.6	-7.00	59.8	0.0	1.40
46466.0	1986 FEB 4.5	0.40	323.9	-6.97	67.0	0.0	1.38
46468.0	1986 FEB 6.5	0.39	331.5	-6.81	74.6	0.0	1.37
46470.0	1986 FEB 8.5	0.38	339.6	-6.61	82.6	0.0	1.35
46472.0	1986 FEB 10.5	0.37	348.2	-6.05	91.1	0.0	1.32
46474.0	1986 FEB 12.5	0.36	357.3	-5.42	100.2	0.0	1.30
46476.0	1986 FEB 14.5	0.35	7.0	-4.60	109.9	0.0	1.27
46478.0	1986 FEB 16.5	0.34	17.3	-3.58	120.2	0.0	1.23

MERCURY

	DATE	R	LONG	LAT	RAS	DECS	CDIST
46480.0	1986 FEB 18.5	0.33	28.1	-2.37	131.2	0.0	1.19
46482.0	1986 FEB 20.5	0.32	39.6	-1.01	142.7	0.0	1.15
46484.0	1986 FEB 22.5	0.31	51.6	0.46	154.8	0.0	1.10
46486.0	1986 FEB 24.5	0.31	64.0	1.95	167.2	0.0	1.04
46488.0	1986 FEB 26.5	0.31	76.6	3.38	179.9	0.0	0.99
46490.0	1986 MAR 0.5	0.31	89.2	4.64	192.6	0.0	0.93
46492.0	1986 MAR 2.5	0.31	101.6	5.66	205.0	0.0	0.88
46494.0	1986 MAR 4.5	0.32	113.8	6.40	217.1	0.0	0.82
46496.0	1986 MAR 6.5	0.33	125.4	6.84	228.6	0.0	0.77
46498.0	1986 MAR 8.5	0.34	136.4	7.00	239.6	0.0	0.73
46500.0	1986 MAR 10.5	0.35	146.8	6.92	249.9	0.0	0.69
46502.0	1986 MAR 12.5	0.36	156.6	6.64	259.6	0.0	0.66
46504.0	1986 MAR 14.5	0.37	165.7	6.20	268.7	0.0	0.63
46506.0	1986 MAR 16.5	0.38	174.3	5.64	277.3	0.0	0.62
46508.0	1986 MAR 18.5	0.39	182.4	5.01	285.3	0.0	0.61
46510.0	1986 MAR 20.5	0.40	189.9	4.32	292.9	0.0	0.61
46512.0	1986 MAR 22.5	0.41	197.1	3.59	300.1	0.0	0.61
46514.0	1986 MAR 24.5	0.42	204.0	2.85	307.0	0.0	0.62
46516.0	1986 MAR 26.5	0.43	210.5	2.10	313.5	0.0	0.64
46518.0	1986 MAR 28.5	0.44	216.8	1.35	319.9	0.0	0.65
46520.0	1986 MAR 30.5	0.45	222.8	0.62	326.0	0.0	0.67
46522.0	1986 APR 1.5	0.45	228.7	-0.11	331.9	0.0	0.70
46524.0	1986 APR 3.5	0.46	234.5	-0.81	337.7	0.0	0.72
46526.0	1986 APR 5.5	0.46	240.1	-1.49	343.3	0.0	0.75
46528.0	1986 APR 7.5	0.46	245.7	-2.15	348.9	0.0	0.78
46530.0	1986 APR 9.5	0.47	251.1	-2.78	354.5	0.0	0.81
46532.0	1986 APR 11.5	0.47	256.6	-3.38	360.0	0.0	0.83
46534.0	1986 APR 13.5	0.47	262.1	-3.96	5.5	0.0	0.86
46536.0	1986 APR 15.5	0.46	267.7	-4.50	11.0	0.0	0.89
46538.0	1986 APR 17.5	0.46	273.2	-5.00	16.6	0.0	0.92
46540.0	1986 APR 19.5	0.46	278.9	-5.46	22.3	0.0	0.95
46542.0	1986 APR 21.5	0.45	284.7	-5.87	28.1	0.0	0.98
46544.0	1986 APR 23.5	0.45	290.7	-6.24	34.0	0.0	1.01
46546.0	1986 APR 25.5	0.44	296.8	-6.54	40.1	0.0	1.04
46548.0	1986 APR 27.5	0.43	303.2	-6.78	46.4	0.0	1.07
46550.0	1986 APR 29.5	0.42	309.8	-6.94	53.0	0.0	1.10
46552.0	1986 MAY 1.5	0.41	316.7	-7.00	59.9	0.0	1.13
46554.0	1986 MAY 3.5	0.40	323.9	-6.96	67.1	0.0	1.16
46556.0	1986 MAY 5.5	0.39	331.6	-6.81	74.7	0.0	1.18
46558.0	1986 MAY 7.5	0.38	339.7	-6.51	82.7	0.0	1.21
46560.0	1986 MAY 9.5	0.37	348.3	-6.05	91.2	0.0	1.24
46562.0	1986 MAY 11.5	0.36	357.4	-5.41	100.3	0.0	1.26
46564.0	1986 MAY 13.5	0.35	7.1	-4.59	110.0	0.0	1.28
46566.0	1986 MAY 15.5	0.34	17.4	-3.57	120.4	0.0	1.30
46568.0	1986 MAY 17.5	0.33	28.3	-2.36	131.3	0.0	1.31
46570.0	1986 MAY 19.5	0.32	39.8	-0.99	142.9	0.0	1.32
46572.0	1986 MAY 21.5	0.31	51.7	0.48	154.9	0.0	1.32
46574.0	1986 MAY 23.5	0.31	64.1	1.97	167.4	0.0	1.32
46576.0	1986 MAY 25.5	0.31	76.7	3.39	180.1	0.0	1.31
46578.0	1986 MAY 27.5	0.31	89.3	4.65	192.7	0.0	1.30
46580.0	1986 MAY 29.5	0.31	101.8	5.67	205.2	0.0	1.28
46582.0	1986 JUN 0.5	0.32	113.9	6.41	217.2	0.0	1.26
46584.0	1986 JUN 2.5	0.33	125.5	6.84	228.8	0.0	1.23
46586.0	1986 JUN 4.5	0.34	136.6	7.00	239.7	0.0	1.20
46588.0	1986 JUN 6.5	0.35	146.9	6.92	250.0	0.0	1.17
46590.0	1986 JUN 8.5	0.36	156.7	6.63	259.7	0.0	1.13
46592.0	1986 JUN 10.5	0.37	165.8	6.19	268.8	0.0	1.10
46594.0	1986 JUN 12.5	0.38	174.4	5.64	277.4	0.0	1.06
46596.0	1986 JUN 14.5	0.39	182.5	5.00	285.4	0.0	1.03
46598.0	1986 JUN 16.5	0.40	190.0	4.31	293.0	0.0	0.99
46600.0	1986 JUN 18.5	0.41	197.2	3.58	300.2	0.0	0.95

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

	DATE	EARTH R	EARTH LONG	EARTH LAT	EARTH RAS	EARTH DECS	VENUS R	VENUS LONG	VENUS LAT	VENUS RAS	VENUS DECS	CDIST
41600.0	1972 OCT 9.5	1.00	16.1	0.0	194.9	-6.3	0.72	87.7	0.67	136.7	0.0	1.03
41610.0	1972 OCT 19.5	1.00	26.0	0.0	204.1	-10.1	0.72	103.9	1.57	152.9	0.0	1.10
41620.0	1972 OCT 29.5	0.99	36.0	0.0	213.7	-13.5	0.72	120.1	2.35	169.1	0.0	1.16
41630.0	1972 NOV 8.5	0.99	46.0	0.0	223.6	-16.6	0.72	136.3	2.94	185.4	0.0	1.23
41640.0	1972 NOV 18.5	0.99	56.1	0.0	233.8	-19.3	0.72	152.6	3.30	201.6	0.0	1.29
41650.0	1972 NOV 28.5	0.99	66.2	0.0	244.3	-21.3	0.72	168.8	3.39	217.8	0.0	1.34
41660.0	1972 DEC 8.5	0.98	76.3	0.0	255.2	-22.7	0.72	185.0	3.22	234.0	0.0	1.39
41670.0	1972 DEC 18.5	0.98	86.5	0.0	266.2	-23.4	0.72	201.2	2.79	250.1	0.0	1.44
41680.0	1972 DEC 28.5	0.98	96.7	0.0	277.3	-23.3	0.72	217.2	2.14	266.2	0.0	1.49
41690.0	1973 JAN 7.5	0.98	106.9	0.0	288.3	-22.4	0.72	233.2	1.33	282.2	0.0	1.53
41700.0	1973 JAN 17.5	0.98	117.1	0.0	299.1	-20.7	0.73	249.1	0.42	298.1	0.0	1.57
41710.0	1973 JAN 27.5	0.98	127.2	0.0	309.7	-18.5	0.73	265.0	-0.51	314.0	0.0	1.60
41720.0	1973 FEB 6.5	0.99	137.4	0.0	319.9	-15.6	0.73	280.8	-1.41	329.9	0.0	1.63
41730.0	1973 FEB 16.5	0.99	147.5	0.0	329.7	-12.3	0.73	296.7	-2.20	345.7	0.0	1.66
41740.0	1973 FEB 26.5	0.99	157.6	0.0	339.3	-8.7	0.73	312.5	-2.82	1.5	0.0	1.68
41750.0	1973 MAR 8.5	0.99	167.6	0.0	348.6	-4.9	0.73	328.3	-3.23	17.3	0.0	1.70
41760.0	1973 MAR 18.5	1.00	177.6	0.0	357.8	-1.0	0.73	344.1	-3.39	33.1	0.0	1.71
41770.0	1973 MAR 28.5	1.00	187.5	0.0	6.9	3.0	0.73	0.0	-3.30	49.0	0.0	1.72
41780.0	1973 APR 7.5	1.00	197.3	0.0	16.0	6.8	0.73	16.0	-2.95	64.9	0.0	1.73
41790.0	1973 APR 17.5	1.00	207.1	0.0	25.2	10.5	0.72	31.9	-2.38	80.9	0.0	1.73
41800.0	1973 APR 27.5	1.01	216.9	0.0	34.6	13.8	0.72	47.9	-1.62	96.9	0.0	1.72
41810.0	1973 MAY 7.5	1.01	226.6	0.0	44.1	16.8	0.72	64.0	-0.73	113.0	0.0	1.71
41820.0	1973 MAY 17.5	1.01	236.2	0.0	54.0	19.3	0.72	80.1	0.22	129.1	0.0	1.70
41830.0	1973 MAY 27.5	1.01	245.9	0.0	64.0	21.3	0.72	96.3	1.16	145.3	0.0	1.67
41840.0	1973 JUN 6.5	1.01	255.4	0.0	74.2	22.7	0.72	112.5	2.00	161.5	0.0	1.65
41850.0	1973 JUN 16.5	1.02	265.0	0.0	84.6	23.4	0.72	128.7	2.69	177.7	0.0	1.61
41860.0	1973 JUN 26.5	1.02	274.5	0.0	95.0	23.4	0.72	144.9	3.16	194.0	0.0	1.57
41870.0	1973 JUL 6.5	1.02	284.1	0.0	105.3	22.7	0.72	161.2	3.38	210.2	0.0	1.53
41880.0	1973 JUL 16.5	1.02	293.6	0.0	115.5	21.4	0.72	177.4	3.33	226.4	0.0	1.48
41890.0	1973 JUL 26.5	1.02	303.2	0.0	125.5	19.5	0.72	193.6	3.02	242.5	0.0	1.43
41900.0	1973 AUG 5.5	1.01	312.7	0.0	135.2	17.0	0.72	209.7	2.47	258.6	0.0	1.37
41910.0	1973 AUG 15.5	1.01	322.3	0.0	144.7	14.1	0.72	225.7	1.73	274.7	0.0	1.31
41920.0	1973 AUG 25.5	1.01	331.9	0.0	154.0	10.8	0.73	241.7	0.86	290.6	0.0	1.25
41930.0	1973 SEP 4.5	1.01	341.6	0.0	163.1	7.2	0.73	257.6	-0.07	306.6	0.0	1.18
41940.0	1973 SEP 14.5	1.01	351.3	0.0	172.1	3.4	0.73	273.4	-1.00	322.4	0.0	1.11
41950.0	1973 SEP 24.5	1.00	1.1	0.0	181.0	-0.4	0.73	289.2	-1.85	338.3	0.0	1.04
41960.0	1973 OCT 4.5	1.00	10.9	0.0	190.1	-4.3	0.73	305.0	-2.55	354.1	0.0	0.97
41970.0	1973 OCT 14.5	1.00	20.8	0.0	199.2	-8.1	0.73	320.9	-3.07	9.9	0.0	0.89
41980.0	1973 OCT 24.5	0.99	30.7	0.0	208.6	-11.7	0.73	336.7	-3.35	25.7	0.0	0.82
41990.0	1973 NOV 3.5	0.99	40.7	0.0	218.3	-15.1	0.73	352.6	-3.37	41.5	0.0	0.74
42000.0	1973 NOV 13.5	0.99	50.8	0.0	228.4	-18.0	0.73	8.5	-3.14	57.4	0.0	0.67
42010.0	1973 NOV 23.5	0.99	60.9	0.0	238.7	-20.3	0.72	24.4	-2.67	73.4	0.0	0.59
42020.0	1973 DEC 3.5	0.99	71.0	0.0	249.4	-22.1	0.72	40.4	-1.99	89.3	0.0	0.52
42030.0	1973 DEC 13.5	0.98	81.2	0.0	260.4	-23.2	0.72	56.4	-1.16	105.4	0.0	0.45
42040.0	1973 DEC 23.5	0.98	91.3	0.0	271.5	-23.4	0.72	72.5	-0.23	121.5	0.0	0.38
42050.0	1974 JAN 2.5	0.98	101.5	0.0	282.5	-22.9	0.72	88.7	0.73	137.7	0.0	0.32
42060.0	1974 JAN 12.5	0.98	111.7	0.0	293.5	-21.7	0.72	104.8	1.62	153.9	0.0	0.28
42070.0	1974 JAN 22.5	0.98	121.9	0.0	304.2	-19.7	0.72	121.1	2.39	170.1	0.0	0.27
42080.0	1974 FEB 1.5	0.99	132.1	0.0	314.5	-17.2	0.72	137.3	2.97	186.3	0.0	0.28
42090.0	1974 FEB 11.5	0.99	142.2	0.0	324.6	-14.1	0.72	153.6	3.31	202.6	0.0	0.32
42100.0	1974 FEB 21.5	0.99	152.3	0.0	334.3	-10.7	0.72	169.8	3.39	218.8	0.0	0.38
42110.0	1974 MAR 3.5	0.99	162.3	0.0	343.7	-6.9	0.72	186.0	3.20	235.0	0.0	0.44
42120.0	1974 MAR 13.5	0.99	172.3	0.0	353.0	-3.0	0.72	202.1	2.75	251.1	0.0	0.52
42130.0	1974 MAR 23.5	1.00	182.3	0.0	2.1	0.9	0.72	218.2	2.10	267.1	0.0	0.59
42140.0	1974 APR 2.5	1.00	192.2	0.0	11.2	4.8	0.72	234.2	1.28	283.1	0.0	0.67
42150.0	1974 APR 12.5	1.00	202.0	0.0	20.4	8.6	0.73	250.1	0.37	299.1	0.0	0.75
42160.0	1974 APR 22.5	1.01	211.8	0.0	29.6	12.1	0.73	266.0	-0.57	315.0	0.0	0.83
42170.0	1974 MAY 2.5	1.01	221.5	0.0	39.1	15.3	0.73	281.8	-1.46	330.8	0.0	0.90
42180.0	1974 MAY 12.5	1.01	231.2	0.0	48.8	18.1	0.73	297.6	-2.24	346.6	0.0	0.98
42190.0	1974 MAY 22.5	1.01	240.8	0.0	58.7	20.3	0.73	313.4	-2.85	2.5	0.0	1.06
42200.0	1974 JUN 1.5	1.01	250.4	0.0	68.8	22.0	0.73	329.2	-3.24	18.3	0.0	1.13
42210.0	1974 JUN 11.5	1.02	260.0	0.0	79.1	23.1	0.73	345.1	-3.39	34.1	0.0	1.20
42220.0	1974 JUN 21.5	1.02	269.5	0.0	89.5	23.4	0.73	1.0	-3.28	50.0	0.0	1.26
42230.0	1974 JUL 1.5	1.02	279.1	0.0	99.9	23.1	0.73	16.9	-2.92	65.9	0.0	1.33
42240.0	1974 JUL 11.5	1.02	288.6	0.0	110.2	22.2	0.72	32.9	-2.34	81.8	0.0	1.39
42250.0	1974 JUL 21.5	1.02	298.1	0.0	120.3	20.5	0.72	48.9	-1.56	97.8	0.0	1.44
42260.0	1974 AUG 0.5	1.02	307.7	0.0	130.1	18.3	0.72	65.0	-0.67	113.9	0.0	1.49
42270.0	1974 AUG 10.5	1.01	317.3	0.0	139.7	15.7	0.72	81.1	0.28	130.1	0.0	1.54
42280.0	1974 AUG 20.5	1.01	326.9	0.0	149.1	12.5	0.72	97.2	1.21	146.2	0.0	1.58
42290.0	1974 AUG 30.5	1.01	336.5	0.0	158.3	9.1	0.72	113.4	2.05	162.5	0.0	1.61
42300.0	1974 SEP 9.5	1.01	346.2	0.0	167.3	5.4	0.72	129.7	2.72	178.7	0.0	1.64
42310.0	1974 SEP 19.5	1.00	356.0	0.0	176.3	1.6	0.72	145.9	3.18	194.9	0.0	1.67
42320.0	1974 SEP 29.5	1.00	5.8	0.0	185.3	-2.3	0.72	162.2	3.39	211.2	0.0	1.68
42330.0	1974 OCT 9.5	1.00	15.6	0.0	194.4	-6.2	0.72	178.4	3.32	227.4	0.0	1.70
42340.0	1974 OCT 19.5	1.00	25.5	0.0	203.7	-9.9	0.72	194.6	2.99	243.5	0.0	1.71
42350.0	1974 OCT 29.5	0.99	35.5	0.0	213.2	-13.4	0.72	210.7	2.43	259.6	0.0	1.71
42360.0	1974 NOV 8.5	0.99	45.5	0.0	223.0	-16.5	0.72	226.7	1.68	275.6	0.0	1.71
42370.0	1974 NOV 18.5	0.99	55.6	0.0	233.2	-19.2	0.73	242.6	0.80	291.6	0.0	1.71
42380.0	1974 NOV 28.5	0.99	65.7	0.0	243.8	-21.3	0.73	258.5	-0.13	307.5	0.0	1.70
42390.0	1974 DEC 8.5	0.98	75.8	0.0	254.6	-22.7	0.73	274.4	-1.05	323.4	0.0	1.69
42400.0	1974 DEC 18.5	0.98	86.0	0.0	265.6	-23.4	0.73	290.2	-1.89	339.2	0.0	1.67
42410.0	1974 DEC 28.5	0.98	96.2	0.0	276.7	-23.3	0.73	306.0	-2.59	355.0	0.0	1.65
42420.0	1975 JAN 7.5	0.98	106.4	0.0	287.8	-22.4	0.73	321.8	-3.09	10.8	0.0	1.63
42430.0	1975 JAN 17.5	0.98	116.5	0.0	298.6	-20.8	0.73	337.6	-3.36	26.6	0.0	1.60
42440.0	1975 JAN 27.5	0.98	126.7	0.0	309.1	-18.6	0.73	353.5	-3.37	42.5	0.0	1.57

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

	DATE	EARTH R	EARTH LONG	EARTH LAT	EARTH RAS	EARTH DECS	VENUS R	VENUS LONG	VENUS LAT	VENUS RAS	VENUS DECS	VENUS CDIST
42450.0	1975 FEB 6.5	0.99	136.9	0.0	319.3	-15.8	0.73	9.4	-3.12	58.4	0.0	1.54
42460.0	1975 FEB 16.5	0.99	147.0	0.0	329.2	-12.5	0.72	25.4	-2.64	74.3	0.0	1.50
42470.0	1975 FEB 26.5	0.99	157.1	0.0	338.8	-8.9	0.72	41.4	-1.95	90.3	0.0	1.46
42480.0	1975 MAR 8.5	0.99	167.1	0.0	348.1	-5.1	0.72	57.4	-1.10	106.4	0.0	1.41
42490.0	1975 MAR 18.5	1.00	177.1	0.0	357.3	-1.2	0.72	73.5	-0.17	122.5	0.0	1.36
42500.0	1975 MAR 28.5	1.00	187.0	0.0	6.4	2.8	0.72	89.6	0.78	138.6	0.0	1.30
42510.0	1975 APR 7.5	1.00	196.9	0.0	15.5	6.6	0.72	105.8	1.67	154.8	0.0	1.24
42520.0	1975 APR 17.5	1.00	206.6	0.0	24.7	10.3	0.72	122.0	2.43	171.1	0.0	1.18
42530.0	1975 APR 27.5	1.01	216.4	0.0	34.1	13.7	0.72	138.3	3.00	187.3	0.0	1.11
42540.0	1975 MAY 7.5	1.01	226.1	0.0	43.7	16.7	0.72	154.5	3.32	203.5	0.0	1.04
42550.0	1975 MAY 17.5	1.01	235.8	0.0	53.4	19.2	0.72	170.8	3.38	219.7	0.0	0.96
42560.0	1975 MAY 27.5	1.01	245.4	0.0	63.5	21.2	0.72	187.0	3.18	235.9	0.0	0.88
42570.0	1975 JUN 6.5	1.01	255.0	0.0	73.7	22.6	0.72	203.1	2.72	252.0	0.0	0.80
42580.0	1975 JUN 16.5	1.02	264.5	0.0	84.0	23.3	0.72	219.2	2.05	268.1	0.0	0.72
42590.0	1975 JUN 26.5	1.02	274.1	0.0	94.4	23.4	0.72	235.1	1.23	284.1	0.0	0.64
42600.0	1975 JUL 6.5	1.02	283.6	0.0	104.8	22.7	0.73	251.1	0.31	300.0	0.0	0.56
42610.0	1975 JUL 16.5	1.02	293.1	0.0	115.0	21.5	0.73	266.9	-0.62	315.9	0.0	0.49
42620.0	1975 JUL 26.5	1.02	302.7	0.0	125.0	19.6	0.73	282.7	-1.51	331.8	0.0	0.41
42630.0	1975 AUG 5.5	1.01	312.2	0.0	134.7	17.1	0.73	298.5	-2.28	347.6	0.0	0.35
42640.0	1975 AUG 15.5	1.01	321.8	0.0	144.2	14.2	0.73	314.4	-2.88	3.4	0.0	0.31
42650.0	1975 AUG 25.5	1.01	331.5	0.0	153.5	11.0	0.73	330.2	-3.26	19.2	0.0	0.29
42660.0	1975 SEP 4.5	1.01	341.1	0.0	162.6	7.4	0.73	346.0	-3.39	35.0	0.0	0.29
42670.0	1975 SEP 14.5	1.01	350.8	0.0	171.6	3.6	0.73	1.9	-3.27	50.9	0.0	0.33
42680.0	1975 SEP 24.5	1.00	0.6	0.0	180.6	-0.2	0.73	17.9	-2.89	66.8	0.0	0.38
42690.0	1975 OCT 4.5	1.00	10.4	0.0	189.6	-4.1	0.72	33.8	-2.29	82.8	0.0	0.44
42700.0	1975 OCT 14.5	1.00	20.3	0.0	198.8	-7.9	0.72	49.9	-1.51	98.8	0.0	0.51
42710.0	1975 OCT 24.5	0.99	30.2	0.0	208.2	-11.6	0.72	65.9	-0.61	114.9	0.0	0.59
42720.0	1975 NOV 3.5	0.99	40.2	0.0	217.8	-14.9	0.72	82.0	0.44	131.0	0.0	0.66
42730.0	1975 NOV 13.5	0.99	50.3	0.0	227.8	-17.8	0.72	98.2	1.27	147.2	0.0	0.74
42740.0	1975 NOV 23.5	0.99	60.4	0.0	238.2	-20.2	0.72	114.4	2.09	163.4	0.0	0.81
42750.0	1975 DEC 3.5	0.99	70.5	0.0	248.9	-22.0	0.72	130.6	2.76	179.7	0.0	0.89
42760.0	1975 DEC 13.5	0.98	80.6	0.0	259.8	-23.1	0.72	146.9	3.20	195.9	0.0	0.96
42770.0	1975 DEC 23.5	0.98	90.8	0.0	270.9	-23.4	0.72	163.1	3.39	212.1	0.0	1.03
42780.0	1976 JAN 2.5	0.98	101.0	0.0	282.0	-23.0	0.72	179.4	3.31	228.3	0.0	1.10
42790.0	1976 JAN 12.5	0.98	111.2	0.0	292.9	-21.8	0.72	195.5	2.96	244.5	0.0	1.16
42800.0	1976 JAN 22.5	0.98	121.4	0.0	303.6	-19.9	0.72	211.6	2.39	260.6	0.0	1.22
42810.0	1976 FEB 1.5	0.99	131.5	0.0	314.0	-17.3	0.72	227.6	1.63	276.6	0.0	1.28
42820.0	1976 FEB 11.5	0.99	141.7	0.0	324.1	-14.3	0.73	243.6	0.75	292.5	0.0	1.34
42830.0	1976 FEB 21.5	0.99	151.8	0.0	333.8	-10.8	0.73	259.5	-0.19	308.5	0.0	1.39
42840.0	1976 MAR 2.5	0.99	161.8	0.0	343.3	-7.1	0.73	275.3	-1.11	324.3	0.0	1.44
42850.0	1976 MAR 12.5	0.99	171.8	0.0	352.5	-3.2	0.73	291.1	-1.94	340.2	0.0	1.49
42860.0	1976 MAR 22.5	1.00	181.8	0.0	1.6	0.7	0.73	306.9	-2.62	356.0	0.0	1.54
42870.0	1976 APR 1.5	1.00	191.7	0.0	10.7	4.6	0.73	322.7	-3.11	11.8	0.0	1.58
42880.0	1976 APR 11.5	1.00	201.5	0.0	19.9	8.4	0.73	338.6	-3.36	27.6	0.0	1.61
42890.0	1976 APR 21.5	1.01	211.3	0.0	29.2	11.9	0.73	354.5	-3.36	43.4	0.0	1.65
42900.0	1976 MAY 1.5	1.01	221.0	0.0	38.6	15.1	0.73	10.4	-3.10	59.3	0.0	1.67
42910.0	1976 MAY 11.5	1.01	230.7	0.0	48.3	17.9	0.72	26.3	-2.60	75.3	0.0	1.70
42920.0	1976 MAY 21.5	1.01	240.3	0.0	58.2	20.2	0.72	42.3	-1.90	91.3	0.0	1.71
42930.0	1976 JUN 0.5	1.01	249.9	0.0	68.3	21.9	0.72	58.4	-1.05	107.3	0.0	1.73
42940.0	1976 JUN 10.5	1.02	259.5	0.0	78.6	23.0	0.72	74.4	-0.11	123.4	0.0	1.73
42950.0	1976 JUN 20.5	1.02	269.0	0.0	89.0	23.4	0.72	90.6	0.84	139.6	0.0	1.74
42960.0	1976 JUL 0.5	1.02	278.6	0.0	99.4	23.2	0.72	106.8	1.72	155.8	0.0	1.73
42970.0	1976 JUL 10.5	1.02	288.1	0.0	109.6	22.2	0.72	123.0	2.47	172.0	0.0	1.72
42980.0	1976 JUL 20.5	1.02	297.7	0.0	119.7	20.6	0.72	139.2	3.02	188.3	0.0	1.70
42990.0	1976 JUL 30.5	1.02	307.2	0.0	129.6	18.5	0.72	155.5	3.33	204.5	0.0	1.68
43000.0	1976 AUG 9.5	1.01	316.8	0.0	139.3	15.8	0.72	171.7	3.38	220.7	0.0	1.65
43010.0	1976 AUG 19.5	1.01	326.4	0.0	148.6	12.7	0.72	187.9	3.16	236.9	0.0	1.62
43020.0	1976 AUG 29.5	1.01	336.0	0.0	157.8	9.3	0.72	204.1	2.69	253.0	0.0	1.59
43030.0	1976 SEP 8.5	1.01	345.7	0.0	166.9	5.6	0.72	220.1	2.01	269.1	0.0	1.54
43040.0	1976 SEP 18.5	1.00	355.5	0.0	175.8	1.8	0.72	236.1	1.17	285.0	0.0	1.50
43050.0	1976 SEP 28.5	1.00	5.3	0.0	184.8	-2.1	0.73	252.0	0.26	301.0	0.0	1.45
43060.0	1976 OCT 8.5	1.00	15.1	0.0	193.9	-6.0	0.73	267.9	-0.68	316.9	0.0	1.40
43070.0	1976 OCT 18.5	1.00	25.0	0.0	203.2	-9.7	0.73	283.7	-1.56	332.7	0.0	1.34
43080.0	1976 OCT 28.5	0.99	35.0	0.0	212.7	-13.2	0.73	299.5	-2.32	348.5	0.0	1.29
43090.0	1976 NOV 7.5	0.99	45.0	0.0	222.5	-16.3	0.73	315.3	-2.91	4.3	0.0	1.23
43100.0	1976 NOV 17.5	0.99	55.0	0.0	232.7	-19.0	0.73	331.1	-3.28	20.2	0.0	1.16
43110.0	1976 NOV 27.5	0.99	65.1	0.0	243.2	-21.2	0.73	347.0	-3.39	36.0	0.0	1.10
43120.0	1976 DEC 7.5	0.99	75.3	0.0	254.1	-22.6	0.73	2.9	-3.25	51.9	0.0	1.03
43130.0	1976 DEC 17.5	0.98	85.5	0.0	265.1	-23.4	0.73	18.8	-2.86	67.8	0.0	0.96
43140.0	1976 DEC 27.5	0.98	95.6	0.0	276.2	-23.3	0.72	34.8	-2.25	83.7	0.0	0.89
43150.0	1977 JAN 6.5	0.98	105.8	0.0	287.2	-22.5	0.72	50.8	-1.46	99.8	0.0	0.82
43160.0	1977 JAN 16.5	0.98	116.0	0.0	298.0	-20.9	0.72	66.9	-0.56	115.9	0.0	0.75
43170.0	1977 JAN 26.5	0.98	126.2	0.0	308.6	-18.7	0.72	83.0	0.39	132.0	0.0	0.67
43180.0	1977 FEB 5.5	0.99	136.4	0.0	318.8	-15.9	0.72	99.2	1.32	148.2	0.0	0.60
43190.0	1977 FEB 15.5	0.99	146.5	0.0	328.7	-12.7	0.72	115.4	2.14	164.4	0.0	0.53
43200.0	1977 FEB 25.5	0.99	156.5	0.0	338.3	-9.1	0.72	131.6	2.79	180.6	0.0	0.46
43210.0	1977 MAR 7.5	0.99	166.6	0.0	347.7	-5.3	0.72	147.9	3.22	196.9	0.0	0.39
43220.0	1977 MAR 17.5	1.00	176.6	0.0	356.9	-1.4	0.72	164.1	3.39	213.1	0.0	0.34
43230.0	1977 MAR 27.5	1.00	186.5	0.0	6.0	2.6	0.72	180.3	3.29	229.3	0.0	0.30
43240.0	1977 APR 6.5	1.00	196.3	0.0	15.1	6.4	0.72	196.5	2.94	245.4	0.0	0.28
43250.0	1977 APR 16.5	1.00	206.1	0.0	24.3	10.1	0.72	212.6	2.35	261.5	0.0	0.30
43260.0	1977 APR 26.5	1.01	215.9	0.0	33.6	13.5	0.72	228.6	1.58	277.5	0.0	0.34
43270.0	1977 MAY 6.5	1.01	225.6	0.0	43.2	16.5	0.73	244.5	0.69	293.5	0.0	0.40
43280.0	1977 MAY 16.5	1.01	235.3	0.0	52.9	19.1	0.73	260.4	-0.24	309.4	0.0	0.47
43290.0	1977 MAY 26.5	1.01	244.9	0.0	62.9	21.1	0.73	276.3	-1.16	325.3	0.0	0.55

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

	DATE	EARTH R	EARTH LONG	EARTH LAT	EARTH RAS	EARTH DECS	VENUS R	VENUS LONG	VENUS LAT	VENUS RAS	VENUS DECS	VENUS CDIST
43300.0	1977 JUN 5.5	1.01	254.5	0.0	73.2	22.[illegible]	0.73	292.1	-1.98	341.1	0.0	0.62
43310.0	1977 JUN 15.5	1.02	264.0	0.0	83.5	23.3	0.73	307.9	-2.66	356.9	0.0	0.70
43320.0	1977 JUN 25.5	1.02	273.6	0.0	93.9	23.4	0.73	323.7	-3.13	12.7	0.0	0.78
43330.0	1977 JUL 5.5	1.02	283.1	0.0	104.3	22.8	0.73	339.5	-3.37	28.5	0.0	0.86
43340.0	1977 JUL 15.5	1.02	292.6	0.0	114.5	21.5	0.73	355.4	-3.35	44.4	0.0	0.94
43350.0	1977 JUL 25.5	1.02	302.2	0.0	124.5	19.7	0.73	11.3	-3.08	60.3	0.0	1.02
43360.0	1977 AUG 4.5	1.01	311.7	0.0	134.2	17.3	0.72	27.3	-2.56	76.2	0.0	1.09
43370.0	1977 AUG 14.5	1.01	321.3	0.0	143.7	14.4	0.72	43.3	-1.85	92.2	0.0	1.16
43380.0	1977 AUG 24.5	1.01	331.0	0.0	153.0	11.1	0.72	59.3	-0.99	108.3	0.0	1.23
43390.0	1977 SEP 3.5	1.01	340.6	0.0	162.1	7.6	0.72	75.4	-0.05	124.4	0.0	1.29
43400.0	1977 SEP 13.5	1.01	350.3	0.0	171.1	3.8	0.72	91.6	0.89	140.6	0.0	1.35
43410.0	1977 SEP 23.5	1.00	0.1	0.0	180.1	-0.0	0.72	107.7	1.77	156.8	0.0	1.40
43420.0	1977 OCT 3.5	1.00	9.9	0.0	189.1	-3.9	0.72	124.0	2.51	173.0	0.0	1.45
43430.0	1977 OCT 13.5	1.00	19.9	0.0	198.3	-7.7	0.72	140.2	3.05	189.3	0.0	1.50
43440.0	1977 OCT 23.5	0.99	29.7	0.0	207.7	-11.4	0.72	156.5	3.34	205.5	0.0	1.54
43450.0	1977 NOV 2.5	0.99	39.7	0.0	217.3	-14.7	0.72	172.7	3.37	221.7	0.0	1.57
43460.0	1977 NOV 12.5	0.99	49.7	0.0	227.3	-17.7	0.72	188.9	3.13	237.8	0.0	1.61
43470.0	1977 NOV 22.5	0.99	59.8	0.0	237.7	-20.1	0.72	205.0	2.65	254.0	0.0	1.63
43480.0	1977 DEC 2.5	0.99	70.0	0.0	248.3	-22.0	0.72	221.1	1.96	270.0	0.0	1.66
43490.0	1977 DEC 12.5	0.98	80.1	0.0	259.3	-23.1	0.72	237.0	1.17	286.0	0.0	1.68
43500.0	1977 DEC 22.5	0.98	90.3	0.0	270.3	-23.4	0.73	253.0	0.20	301.9	0.0	1.69
43510.0	1978 JAN 1.5	0.98	100.5	0.0	281.4	-23.0	0.73	268.8	-0.73	317.8	0.0	1.70
43520.0	1978 JAN 11.5	0.98	110.7	0.0	292.4	-21.9	0.73	284.6	-1.61	333.7	0.0	1.71
43530.0	1978 JAN 21.5	0.98	120.9	0.0	303.1	-20.0	0.73	300.4	-2.36	349.5	0.0	1.71
43540.0	1978 FEB 0.5	0.99	131.0	0.0	313.5	-17.5	0.73	316.3	-2.94	5.3	0.0	1.71
43550.0	1978 FEB 10.5	0.99	141.2	0.0	323.6	-14.4	0.73	332.1	-3.29	21.1	0.0	1.71
43560.0	1978 FEB 20.5	0.99	151.3	0.0	333.3	-11.0	0.73	347.9	-3.39	36.9	0.0	1.70
43570.0	1978 MAR 2.5	0.99	161.3	0.0	342.8	-7.3	0.73	3.8	-3.24	52.8	0.0	1.68
43580.0	1978 MAR 12.5	0.99	171.3	0.0	352.0	-3.4	0.73	19.8	-2.83	68.7	0.0	1.67
43590.0	1978 MAR 22.5	1.00	181.3	0.0	1.2	0.5	0.72	35.8	-2.21	84.7	0.0	1.64
43600.0	1978 APR 1.5	1.00	191.2	0.0	10.3	4.4	0.72	51.8	-1.41	100.7	0.0	1.62
43610.0	1978 APR 11.5	1.00	201.0	0.0	19.4	8.2	0.72	67.8	-0.50	116.8	0.0	1.59
43620.0	1978 APR 21.5	1.01	210.8	0.0	28.7	11.8	0.72	84.0	0.45	133.0	0.0	1.55
43630.0	1978 MAY 1.5	1.01	220.5	0.0	38.1	15.0	0.72	100.1	1.37	149.2	0.0	1.51
43640.0	1978 MAY 11.5	1.01	230.2	0.0	47.8	17.8	0.72	116.3	2.18	165.4	0.0	1.46
43650.0	1978 MAY 21.5	1.01	239.8	0.0	57.7	20.1	0.72	132.6	2.82	181.6	0.0	1.40
43660.0	1978 JUN 0.5	1.01	249.4	0.0	67.8	21.9	0.72	148.8	3.24	197.9	0.0	1.35
43670.0	1978 JUN 10.5	1.02	259.0	0.0	78.1	23.0	0.72	165.1	3.39	214.1	0.0	1.28
43680.0	1978 JUN 20.5	1.02	268.6	0.0	88.4	23.4	0.72	181.3	3.28	230.3	0.0	1.22
43690.0	1978 JUL 0.5	1.02	278.1	0.0	98.8	23.2	0.72	197.4	2.91	246.4	0.0	1.15
43700.0	1978 JUL 10.5	1.02	287.6	0.0	109.1	22.3	0.72	213.5	2.31	262.5	0.0	1.07
43710.0	1978 JUL 20.5	1.02	297.2	0.0	119.2	20.7	0.72	229.5	1.53	278.5	0.0	1.00
43720.0	1978 JUL 30.5	1.02	306.7	0.0	129.1	18.6	0.73	245.5	0.64	294.5	0.0	0.92
43730.0	1978 AUG 9.5	1.01	316.3	0.0	138.8	16.0	0.73	261.4	-0.30	310.4	0.0	0.84
43740.0	1978 AUG 19.5	1.01	325.9	0.0	148.2	12.9	0.73	277.2	-1.21	326.2	0.0	0.76
43750.0	1978 AUG 29.5	1.01	335.5	0.0	157.4	9.5	0.73	293.0	-2.03	342.1	0.0	0.68
43760.0	1978 SEP 8.5	1.01	345.2	0.0	166.4	5.8	0.73	308.8	-2.69	357.9	0.0	0.60
43770.0	1978 SEP 18.5	1.00	355.0	0.0	175.4	2.0	0.73	324.6	-3.15	13.7	0.0	0.53
43780.0	1978 SEP 28.5	1.00	4.7	0.0	184.4	-1.9	0.73	340.5	-3.38	29.5	0.0	0.45
43790.0	1978 OCT 8.5	1.00	14.6	0.0	193.5	-5.8	0.73	356.4	-3.34	45.3	0.0	0.39
43800.0	1978 OCT 18.5	1.00	24.5	0.0	202.7	-9.5	0.73	12.3	-3.05	61.2	0.0	0.33
43810.0	1978 OCT 28.5	0.99	34.5	0.0	212.2	-13.0	0.72	28.2	-2.53	77.2	0.0	0.29
43820.0	1978 NOV 7.5	0.99	44.5	0.0	222.0	-16.2	0.72	44.2	-1.80	93.2	0.0	0.27
43830.0	1978 NOV 17.5	0.99	54.5	0.0	232.2	-18.9	0.72	60.3	-0.94	109.2	0.0	0.28
43840.0	1978 NOV 27.5	0.99	64.6	0.0	242.7	-21.1	0.72	76.4	0.00	125.4	0.0	0.32
43850.0	1978 DEC 7.5	0.99	74.8	0.0	253.5	-22.6	0.72	92.5	0.95	141.5	0.0	0.37
43860.0	1978 DEC 17.5	0.98	84.9	0.0	264.5	-23.3	0.72	108.7	1.82	157.8	0.0	0.44
43870.0	1978 DEC 27.5	0.98	95.1	0.0	275.6	-23.3	0.72	124.9	2.55	174.0	0.0	0.51
43880.0	1979 JAN 6.5	0.98	105.3	0.0	286.6	-22.6	0.72	141.2	3.07	190.2	0.0	0.58
43890.0	1979 JAN 16.5	0.98	115.5	0.0	297.5	-21.0	0.72	157.4	3.35	206.5	0.0	0.66
43900.0	1979 JAN 26.5	0.98	125.7	0.0	308.1	-18.9	0.72	173.7	3.37	222.7	0.0	0.74
43910.0	1979 FEB 5.5	0.99	135.8	0.0	318.3	-16.1	0.72	189.9	3.11	238.8	0.0	0.81
43920.0	1979 FEB 15.5	0.99	146.0	0.0	328.2	-12.9	0.72	206.0	2.61	254.9	0.0	0.89
43930.0	1979 FEB 25.5	0.99	156.0	0.0	337.8	-9.3	0.72	222.0	1.91	271.0	0.0	0.96
43940.0	1979 MAR 7.5	0.99	166.1	0.0	347.2	-5.5	0.72	238.0	1.07	287.0	0.0	1.03
43950.0	1979 MAR 17.5	1.00	176.0	0.0	356.4	-1.6	0.73	253.9	0.14	302.9	0.0	1.10
43960.0	1979 MAR 27.5	1.00	186.0	0.0	5.5	2.4	0.73	269.8	-0.79	318.8	0.0	1.17
43970.0	1979 APR 6.5	1.00	195.8	0.0	14.6	6.2	0.73	285.6	-1.66	334.6	0.0	1.23
43980.0	1979 APR 16.5	1.00	205.6	0.0	23.8	9.9	0.73	301.4	-2.40	350.4	0.0	1.30
43990.0	1979 APR 26.5	1.01	215.4	0.0	33.1	13.3	0.73	317.2	-2.97	6.2	0.0	1.36
44000.0	1979 MAY 6.5	1.01	225.1	0.0	42.7	16.4	0.73	333.0	-3.30	22.0	0.0	1.41
44010.0	1979 MAY 16.5	1.01	234.8	0.0	52.4	19.0	0.73	348.9	-3.39	37.9	0.0	1.47
44020.0	1979 MAY 26.5	1.01	244.4	0.0	62.4	21.0	0.73	4.8	-3.22	53.8	0.0	1.52
44030.0	1979 JUN 5.5	1.01	254.0	0.0	72.6	22.5	0.73	20.7	-2.80	69.7	0.0	1.56
44040.0	1979 JUN 15.5	1.02	263.5	0.0	83.0	23.3	0.72	36.7	-2.17	85.7	0.0	1.60
44050.0	1979 JUN 25.5	1.02	273.1	0.0	93.4	23.4	0.72	52.7	-1.36	101.7	0.0	1.64
44060.0	1979 JUL 5.5	1.02	282.6	0.0	103.7	22.8	0.72	68.8	-0.44	117.8	0.0	1.66
44070.0	1979 JUL 15.5	1.02	292.1	0.0	113.9	21.6	0.72	84.9	0.51	133.9	0.0	1.69
44080.0	1979 JUL 25.5	1.02	301.7	0.0	124.0	19.8	0.72	101.1	1.42	150.1	0.0	1.71
44090.0	1979 AUG 4.5	1.01	311.3	0.0	133.7	17.4	0.72	117.3	2.23	166.4	0.0	1.72
44100.0	1979 AUG 14.5	1.01	320.8	0.0	143.3	14.5	0.72	133.6	2.86	182.6	0.0	1.73
44110.0	1979 AUG 24.5	1.01	330.5	0.0	152.5	11.3	0.72	149.8	3.25	198.8	0.0	1.73
44120.0	1979 SEP 3.5	1.01	340.1	0.0	161.7	7.8	0.72	166.1	3.39	215.0	0.0	1.73
44130.0	1979 SEP 13.5	1.01	349.8	0.0	170.7	4.0	0.72	182.3	3.26	231.2	0.0	1.72
44140.0	1979 SEP 23.5	1.00	359.6	0.0	179.6	0.2	0.72	198.4	2.88	247.4	0.0	1.70

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

	DATE	EARTH R	EARTH LONG	EARTH LAT	EARTH RAS	EARTH DECS	VENUS R	VENUS LONG	VENUS LAT	VENUS RAS	VENUS DECS	VENUS CDIST
44150.0	1979 OCT 3.5	1.00	9.4	0.0	188.7	-3.7	0.72	214.5	2.26	263.4	0.0	1.68
44160.0	1979 OCT 13.5	1.00	19.3	0.0	197.8	-7.6	0.72	230.5	1.48	279.5	0.0	1.66
44170.0	1979 OCT 23.5	0.99	29.2	0.0	207.2	-11.2	0.73	246.4	0.58	295.4	0.0	1.63
44180.0	1979 NOV 2.5	0.99	39.2	0.0	216.8	-14.6	0.73	262.3	-0.35	311.3	0.0	1.60
44190.0	1979 NOV 12.5	0.99	49.2	0.0	226.8	-17.5	0.73	278.1	-1.26	327.2	0.0	1.57
44200.0	1979 NOV 22.5	0.99	59.3	0.0	237.1	-20.0	0.73	294.0	-2.07	343.0	0.0	1.53
44210.0	1979 DEC 2.5	0.99	69.4	0.0	247.8	-21.9	0.73	309.8	-2.73	358.8	0.0	1.49
44220.0	1979 DEC 12.5	0.98	79.6	0.0	258.7	-23.0	0.73	325.6	-3.17	14.6	0.0	1.44
44230.0	1979 DEC 22.5	0.98	89.8	0.0	269.8	-23.4	0.73	341.4	-3.38	30.4	0.0	1.40
44240.0	1980 JAN 1.5	0.98	100.0	0.0	280.9	-23.1	0.73	357.3	-3.33	46.3	0.0	1.34
44250.0	1980 JAN 11.5	0.98	110.1	0.0	291.8	-21.9	0.73	13.2	-3.03	62.2	0.0	1.29
44260.0	1980 JAN 21.5	0.98	120.3	0.0	302.5	-20.1	0.72	29.2	-2.49	78.1	0.0	1.23
44270.0	1980 FEB 0.5	0.99	130.5	0.0	313.0	-17.6	0.72	45.2	-1.76	94.1	0.0	1.17
44280.0	1980 FEB 10.5	0.99	140.6	0.0	323.1	-14.6	0.72	61.2	-0.88	110.2	0.0	1.11
44290.0	1980 FEB 20.5	0.99	150.7	0.0	332.8	-11.2	0.72	77.3	0.06	126.3	0.0	1.04
44300.0	1980 MAR 1.5	0.99	160.8	0.0	342.3	-7.5	0.72	93.5	1.00	142.5	0.0	0.97
44310.0	1980 MAR 11.5	0.99	170.8	0.0	351.6	-3.6	0.72	109.7	1.87	158.7	0.0	0.90
44320.0	1980 MAR 21.5	1.00	180.8	0.0	0.7	0.3	0.72	125.9	2.59	175.0	0.0	0.83
44330.0	1980 APR 0.5	1.00	190.7	0.0	9.8	4.2	0.72	142.2	3.10	191.2	0.0	0.75
44340.0	1980 APR 10.5	1.00	200.5	0.0	18.9	8.0	0.72	158.4	3.36	207.4	0.0	0.67
44350.0	1980 APR 20.5	1.00	210.3	0.0	28.2	11.6	0.72	174.6	3.36	223.6	0.0	0.60
44360.0	1980 MAY 0.5	1.01	220.0	0.0	37.6	14.8	0.72	190.8	3.09	239.8	0.0	0.52
44370.0	1980 MAY 10.5	1.01	229.7	0.0	47.3	17.7	0.72	206.9	2.58	255.9	0.0	0.44
44380.0	1980 MAY 20.5	1.01	239.3	0.0	57.1	20.0	0.72	223.0	1.87	271.9	0.0	0.38
44390.0	1980 MAY 30.5	1.01	248.9	0.0	67.2	21.8	0.72	239.0	1.01	287.9	0.0	0.33
44400.0	1980 JUN 9.5	1.02	258.5	0.0	77.5	22.9	0.73	254.9	0.09	303.8	0.0	0.29
44410.0	1980 JUN 19.5	1.02	268.1	0.0	87.9	23.4	0.73	270.7	-0.84	319.7	0.0	0.29
44420.0	1980 JUN 29.5	1.02	277.6	0.0	98.3	23.2	0.73	286.5	-1.71	335.6	0.0	0.32
44430.0	1980 JUL 9.5	1.02	287.1	0.0	108.6	22.3	0.73	302.3	-2.44	351.4	0.0	0.37
44440.0	1980 JUL 19.5	1.02	296.7	0.0	118.7	20.8	0.73	318.1	-2.99	7.2	0.0	0.43
44450.0	1980 JUL 29.5	1.02	306.2	0.0	128.6	18.7	0.73	334.0	-3.32	23.0	0.0	0.50
44460.0	1980 AUG 8.5	1.01	315.8	0.0	138.3	16.1	0.73	349.8	-3.39	38.8	0.0	0.58
44470.0	1980 AUG 18.5	1.01	325.4	0.0	147.7	13.1	0.73	5.7	-3.20	54.7	0.0	0.66
44480.0	1980 AUG 28.5	1.01	335.0	0.0	156.9	9.7	0.72	21.7	-2.77	70.6	0.0	0.74
44490.0	1980 SEP 7.5	1.01	344.7	0.0	166.0	6.0	0.72	37.7	-2.12	86.6	0.0	0.81
44500.0	1980 SEP 17.5	1.00	354.5	0.0	174.9	2.2	0.72	53.7	-1.31	102.7	0.0	0.89
44510.0	1980 SEP 27.5	1.00	4.2	0.0	183.9	-1.7	0.72	69.8	-0.39	118.7	0.0	0.96
44520.0	1980 OCT 7.5	1.00	14.1	0.0	193.0	-5.6	0.72	85.9	0.57	134.9	0.0	1.03
44530.0	1980 OCT 17.5	1.00	24.0	0.0	202.2	-9.3	0.72	102.1	1.48	151.1	0.0	1.10
44540.0	1980 OCT 27.5	0.99	33.9	0.0	211.7	-12.8	0.72	118.3	2.27	167.3	0.0	1.17
44550.0	1980 NOV 6.5	0.99	44.0	0.0	221.5	-16.0	0.72	134.5	2.89	183.6	0.0	1.23
44560.0	1980 NOV 16.5	0.99	54.0	0.0	231.7	-18.8	0.72	150.8	3.27	199.8	0.0	1.29
44570.0	1980 NOV 26.5	0.99	64.1	0.0	242.1	-21.0	0.72	167.0	3.39	216.0	0.0	1.34
44580.0	1980 DEC 6.5	0.99	74.3	0.0	252.9	-22.5	0.72	183.2	3.25	232.2	0.0	1.40
44590.0	1980 DEC 16.5	0.98	84.4	0.0	263.9	-23.3	0.72	199.4	2.85	248.3	0.0	1.44
44600.0	1980 DEC 26.5	0.98	94.6	0.0	275.0	-23.4	0.72	215.5	2.22	264.4	0.0	1.49
44610.0	1981 JAN 5.5	0.98	104.8	0.0	286.1	-22.6	0.72	231.5	1.43	280.4	0.0	1.53
44620.0	1981 JAN 15.5	0.98	115.0	0.0	296.9	-21.1	0.73	247.4	0.53	296.4	0.0	1.57
44630.0	1981 JAN 25.5	0.98	125.2	0.0	307.5	-19.0	0.73	263.3	-0.41	312.3	0.0	1.60
44640.0	1981 FEB 4.5	0.99	135.3	0.0	317.8	-16.2	0.73	279.1	-1.32	328.1	0.0	1.63
44650.0	1981 FEB 14.5	0.99	145.4	0.0	327.7	-13.0	0.73	294.9	-2.12	343.9	0.0	1.66
44660.0	1981 FEB 24.5	0.99	155.5	0.0	337.3	-9.5	0.73	310.7	-2.76	359.8	0.0	1.68
44670.0	1981 MAR 6.5	0.99	165.5	0.0	346.7	-5.7	0.73	326.5	-3.19	15.6	0.0	1.70
44680.0	1981 MAR 16.5	0.99	175.5	0.0	355.9	-1.8	0.73	342.4	-3.39	31.4	0.0	1.71
44690.0	1981 MAR 26.5	1.00	185.5	0.0	5.0	2.2	0.73	358.3	-3.32	47.2	0.0	1.72
44700.0	1981 APR 5.5	1.00	195.3	0.0	14.1	6.0	0.73	14.2	-3.00	63.1	0.0	1.73
44710.0	1981 APR 15.5	1.00	205.1	0.0	23.3	9.7	0.72	30.1	-2.45	79.1	0.0	1.73
44720.0	1981 APR 25.5	1.01	214.9	0.0	32.6	13.2	0.72	46.2	-1.71	95.1	0.0	1.72
44730.0	1981 MAY 5.5	1.01	224.6	0.0	42.2	16.2	0.72	62.2	-0.83	111.2	0.0	1.71
44740.0	1981 MAY 15.5	1.01	234.3	0.0	51.9	18.8	0.72	78.3	0.12	127.3	0.0	1.69
44750.0	1981 MAY 25.5	1.01	243.9	0.0	61.9	20.9	0.72	94.5	1.06	143.5	0.0	1.67
44760.0	1981 JUN 4.5	1.01	253.5	0.0	72.1	22.4	0.72	110.7	1.92	159.7	0.0	1.65
44770.0	1981 JUN 14.5	1.02	263.0	0.0	82.4	23.3	0.72	126.9	2.62	175.9	0.0	1.61
44780.0	1981 JUN 24.5	1.02	272.6	0.0	92.8	23.4	0.72	143.1	3.12	192.2	0.0	1.57
44790.0	1981 JUL 4.5	1.02	282.1	0.0	103.2	22.9	0.72	159.4	3.37	208.4	0.0	1.53
44800.0	1981 JUL 14.5	1.02	291.7	0.0	113.4	21.7	0.72	175.6	3.35	224.6	0.0	1.48
44810.0	1981 JUL 24.5	1.02	301.2	0.0	123.4	19.9	0.72	191.8	3.06	240.7	0.0	1.43
44820.0	1981 AUG 3.5	1.01	310.8	0.0	133.2	17.5	0.72	207.9	2.54	256.8	0.0	1.37
44830.0	1981 AUG 13.5	1.01	320.3	0.0	142.8	14.7	0.72	223.9	1.82	272.9	0.0	1.31
44840.0	1981 AUG 23.5	1.01	330.0	0.0	152.1	11.5	0.72	239.9	0.96	288.9	0.0	1.24
44850.0	1981 SEP 2.5	1.01	339.6	0.0	161.2	8.0	0.73	255.8	0.03	304.8	0.0	1.18
44860.0	1981 SEP 12.5	1.01	349.3	0.0	170.2	4.2	0.73	271.7	-0.90	320.7	0.0	1.11
44870.0	1981 SEP 22.5	1.00	359.1	0.0	179.2	0.4	0.73	287.5	-1.76	336.5	0.0	1.04
44880.0	1981 OCT 2.5	1.00	8.9	0.0	188.2	-3.5	0.73	303.3	-2.48	352.3	0.0	0.96
44890.0	1981 OCT 12.5	1.00	18.8	0.0	197.3	-7.4	0.73	319.1	-3.02	8.1	0.0	0.89
44900.0	1981 OCT 22.5	1.00	28.7	0.0	206.7	-11.0	0.73	334.9	-3.33	23.9	0.0	0.82
44910.0	1981 NOV 1.5	0.99	38.7	0.0	216.3	-14.4	0.73	350.8	-3.38	39.8	0.0	0.74
44920.0	1981 NOV 11.5	0.99	48.7	0.0	226.3	-17.4	0.73	6.7	-3.18	55.7	0.0	0.66
44930.0	1981 NOV 21.5	0.99	58.8	0.0	236.6	-19.9	0.72	22.6	-2.74	71.6	0.0	0.59
44940.0	1981 DEC 1.5	0.99	68.9	0.0	247.2	-21.8	0.72	38.6	-2.08	87.6	0.0	0.51
44950.0	1981 DEC 11.5	0.98	79.1	0.0	258.1	-23.0	0.72	54.7	-1.25	103.6	0.0	0.44
44960.0	1981 DEC 21.5	0.98	89.2	0.0	269.2	-23.4	0.72	70.7	-0.33	119.7	0.0	0.38
44970.0	1982 JAN 0.5	0.98	99.4	0.0	280.3	-23.1	0.72	86.9	0.62	135.9	0.0	0.32
44980.0	1982 JAN 10.5	0.98	109.6	0.0	291.3	-22.0	0.72	103.0	1.53	152.1	0.0	0.28
44990.0	1982 JAN 20.5	0.98	119.8	0.0	302.0	-20.2	0.72	119.3	2.31	168.3	0.0	0.27

TABLE 2-3. PLANETARY EPHEMERIDES (Continued)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

	DATE	EARTH R	EARTH LONG	EARTH LAT	EARTH RAS	EARTH DECS	VENUS R	VENUS LONG	VENUS LAT	VENUS RAS	VENUS DECS	VENUS CDIST
45000.0	1982 JAN 30.5	C.9S	130.0	0.0	312.4	-17.7	0.72	135.5	2.92	184.5	0.0	0.28
45010.0	1982 FEB 9.5	C.99	140.1	0.0	322.5	-14.8	0.72	151.8	3.29	200.8	0.0	0.32
45020.0	1982 FEB 19.5	C.99	150.2	0.0	332.3	-11.4	0.72	168.0	3.39	217.0	0.0	0.38
45030.0	1982 MAR 1.5	C.99	160.3	0.0	341.8	-7.7	0.72	184.2	3.23	233.2	0.0	0.44
45040.0	1982 MAR 11.5	C.99	170.3	0.0	351.1	-3.8	0.72	200.3	2.81	249.3	0.0	0.52
45050.0	1982 MAR 21.5	1.00	180.2	0.0	0.2	0.1	0.72	216.4	2.18	265.4	0.0	0.59
45060.0	1982 APR 0.5	1.00	190.1	0.0	9.3	4.0	0.72	232.4	1.38	281.4	0.0	0.67
45070.0	1982 APR 10.5	1.00	200.0	0.0	18.5	7.9	0.73	248.3	0.47	297.3	0.0	0.75
45080.0	1982 APR 20.5	1.00	209.8	0.0	27.7	11.4	0.73	264.2	-0.47	313.2	0.0	0.83
45090.0	1982 MAY 0.5	1.01	219.5	0.0	37.1	14.7	0.73	280.0	-1.37	329.1	0.0	0.91
45100.0	1982 MAY 10.5	1.01	229.2	0.0	46.8	17.5	0.73	295.9	-2.16	344.9	0.0	0.98
45110.0	1982 MAY 20.5	1.01	238.8	0.0	56.6	19.9	0.73	311.7	-2.79	0.7	0.0	1.06
45120.0	1982 MAY 30.5	1.01	248.4	0.0	66.7	21.7	0.73	327.5	-3.21	16.5	0.0	1.13
45130.0	1982 JUN 9.5	1.02	258.0	0.0	77.0	22.9	0.73	343.3	-3.39	32.3	0.0	1.20
45140.0	1982 JUN 19.5	1.02	267.6	0.0	87.4	23.4	0.73	359.2	-3.31	48.2	0.0	1.27
45150.0	1982 JUN 29.5	1.02	277.1	0.0	97.8	23.3	0.73	15.1	-2.97	64.1	0.0	1.33
45160.0	1982 JUL 9.5	1.02	286.6	0.0	108.1	22.4	0.72	31.1	-2.41	80.0	0.0	1.39
45170.0	1982 JUL 19.5	1.02	296.2	0.0	118.2	20.9	0.72	47.1	-1.66	96.1	0.0	1.44
45180.0	1982 JUL 29.5	1.02	305.7	0.0	128.1	18.8	0.72	63.2	-0.77	112.1	0.0	1.49
45190.0	1982 AUG 8.5	1.01	315.3	0.0	137.8	16.2	0.72	79.3	0.18	128.3	0.0	1.54
45200.0	1982 AUG 18.5	1.01	324.9	0.0	147.2	13.2	0.72	95.4	1.11	144.4	0.0	1.58
45210.0	1982 AUG 28.5	1.01	334.5	0.0	156.4	9.8	0.72	111.6	1.96	160.7	0.0	1.61
45220.0	1982 SEP 7.5	1.01	344.2	0.0	165.5	6.2	0.72	127.9	2.66	176.9	0.0	1.64
45230.0	1982 SEP 17.5	1.00	354.0	0.0	174.5	2.4	0.72	144.1	3.14	193.1	0.0	1.67
45240.0	1982 SEP 27.5	1.00	3.7	0.0	183.5	-1.5	0.72	160.4	3.38	209.4	0.0	1.69
45250.0	1982 OCT 7.5	1.00	13.6	0.0	192.5	-5.4	0.72	176.6	3.34	225.6	0.0	1.70
45260.0	1982 OCT 17.5	1.00	23.5	0.0	201.7	-9.1	0.72	192.8	3.04	241.7	0.0	1.71
45270.0	1982 OCT 27.5	C.99	33.4	0.0	211.2	-12.7	0.72	208.9	2.50	257.8	0.0	1.71
45280.0	1982 NOV 6.5	C.99	43.4	0.0	221.0	-15.9	0.72	224.9	1.77	273.8	0.0	1.71
45290.0	1982 NOV 16.5	C.99	53.5	0.0	231.1	-18.7	0.72	240.9	0.91	289.8	0.0	1.71
45300.0	1982 NOV 26.5	C.99	63.6	0.0	241.6	-20.9	0.73	256.8	-0.03	305.7	0.0	1.70
45310.0	1982 DEC 6.5	C.99	73.7	0.0	252.4	-22.5	0.73	272.6	-0.95	321.6	0.0	1.69
45320.0	1982 DEC 16.5	C.98	83.9	0.0	263.4	-23.3	0.73	288.4	-1.81	337.5	0.0	1.67
45330.0	1982 DEC 26.5	C.98	94.1	0.0	274.5	-23.4	0.73	304.2	-2.52	353.3	0.0	1.65
45340.0	1983 JAN 5.5	C.98	104.3	0.0	285.5	-22.7	0.73	320.0	-3.04	9.1	0.0	1.63
45350.0	1983 JAN 15.5	C.98	114.5	0.0	296.4	-21.2	0.73	335.9	-3.34	24.9	0.0	1.60
45360.0	1983 JAN 25.5	C.98	124.6	0.0	307.0	-19.1	0.73	351.7	-3.38	40.7	0.0	1.57
45370.0	1983 FEB 4.5	C.99	134.8	0.0	317.3	-16.4	0.73	7.7	-3.16	56.6	0.0	1.54
45380.0	1983 FEB 14.5	C.99	144.9	0.0	327.2	-13.2	0.72	23.6	-2.70	72.5	0.0	1.50
45390.0	1983 FEB 24.5	C.99	155.0	0.0	336.9	-9.7	0.72	39.6	-2.03	88.5	0.0	1.45
45400.0	1983 MAR 6.5	C.99	165.0	0.0	346.2	-5.9	0.72	55.6	-1.20	104.6	0.0	1.41
45410.0	1983 MAR 16.5	0.99	175.0	0.0	355.4	-2.0	0.72	71.7	-0.27	120.7	0.0	1.36
45420.0	1983 MAR 26.5	1.00	184.9	0.0	4.6	2.0	0.72	87.8	0.68	136.8	0.0	1.30
45430.0	1983 APR 5.5	1.00	194.8	0.0	13.7	5.8	0.72	104.0	1.58	153.0	0.0	1.24
45440.0	1983 APR 15.5	1.00	204.6	0.0	22.8	9.6	0.72	120.2	2.36	169.3	0.0	1.18
45450.0	1983 APR 25.5	1.01	214.4	0.0	32.2	13.0	0.72	136.5	2.94	185.5	0.0	1.11
45460.0	1983 MAY 5.5	1.01	224.1	0.0	41.7	16.1	0.72	152.7	3.30	201.7	0.0	1.04
45470.0	1983 MAY 15.5	1.01	233.8	0.0	51.4	18.7	0.72	169.0	3.39	218.0	0.0	0.96
45480.0	1983 MAY 25.5	1.01	243.4	0.0	61.4	20.8	0.72	185.2	3.21	234.1	0.0	0.88
45490.0	1983 JUN 4.5	1.01	253.0	0.0	71.6	22.4	0.72	201.3	2.78	250.2	0.0	0.80
45500.0	1983 JUN 14.5	1.02	262.6	0.0	81.9	23.2	0.72	217.4	2.14	266.3	0.0	0.72
45510.0	1983 JUN 24.5	1.02	272.1	0.0	92.3	23.4	0.72	233.4	1.32	282.3	0.0	0.64
45520.0	1983 JUL 4.5	1.02	281.6	0.0	102.7	22.9	0.73	249.3	0.42	298.3	0.0	0.56
45530.0	1983 JUL 14.5	1.02	291.2	0.0	112.9	21.8	0.73	265.2	-0.52	314.2	0.0	0.48
45540.0	1983 JUL 24.5	1.02	300.7	0.0	122.9	20.0	0.73	281.0	-1.42	330.0	0.0	0.41
45550.0	1983 AUG 3.5	1.01	310.3	0.0	132.7	17.7	0.73	296.8	-2.20	345.8	0.0	0.35
45560.0	1983 AUG 13.5	1.01	319.9	0.0	142.3	14.9	0.73	312.6	-2.82	1.6	0.0	0.31
45570.0	1983 AUG 23.5	1.01	329.5	0.0	151.6	11.7	0.73	328.4	-3.23	17.5	0.0	0.29
45580.0	1983 SEP 2.5	1.01	339.1	0.0	160.7	8.1	0.73	344.3	-3.39	33.3	0.0	0.30
45590.0	1983 SEP 12.5	1.01	348.8	0.0	169.8	4.4	0.73	0.2	-3.30	49.1	0.0	0.33
45600.0	1983 SEP 22.5	1.00	358.6	0.0	178.7	0.6	0.73	16.1	-2.95	65.0	0.0	0.38
45610.0	1983 OCT 2.5	1.00	8.4	0.0	187.7	-3.3	0.72	32.1	-2.37	81.0	0.0	0.45
45620.0	1983 OCT 12.5	1.00	18.3	0.0	196.9	-7.2	0.72	48.1	-1.61	97.0	0.0	0.52
45630.0	1983 OCT 22.5	1.00	28.2	0.0	206.2	-10.8	0.72	64.1	-0.72	113.1	0.0	0.59
45640.0	1983 NOV 1.5	C.99	38.2	0.0	215.8	-14.2	0.72	80.2	0.23	129.2	0.0	0.67
45650.0	1983 NOV 11.5	C.99	48.2	0.0	225.8	-17.3	0.72	96.4	1.17	145.4	0.0	0.74
45660.0	1983 NOV 21.5	C.99	58.3	0.0	236.0	-19.8	0.72	112.6	2.01	161.6	0.0	0.82
45670.0	1983 DEC 1.5	C.99	68.4	0.0	246.7	-21.7	0.72	128.8	2.69	177.9	0.0	0.89
45680.0	1983 DEC 11.5	C.98	78.5	0.0	257.6	-23.0	0.72	145.1	3.16	194.1	0.0	0.96
45690.0	1983 DEC 21.5	C.98	88.7	0.0	268.6	-23.4	0.72	161.3	3.38	210.3	0.0	1.03
45700.0	1984 JAN 0.5	C.98	98.9	0.0	279.7	-23.1	0.72	177.6	3.33	226.5	0.0	1.10
45710.0	1984 JAN 10.5	C.98	109.1	0.0	290.7	-22.1	0.72	193.7	3.01	242.7	0.0	1.16
45720.0	1984 JAN 20.5	C.98	119.3	0.0	301.5	-20.3	0.72	209.8	2.46	258.8	0.0	1.23
45730.0	1984 JAN 30.5	C.99	129.5	0.0	311.9	-17.9	0.72	225.9	1.72	274.8	0.0	1.29
45740.0	1984 FEB 9.5	C.99	139.6	0.0	322.0	-14.9	0.73	241.8	0.85	290.8	0.0	1.34
45750.0	1984 FEB 19.5	C.99	149.7	0.0	331.8	-11.6	0.73	257.7	-0.08	306.7	0.0	1.40
45760.0	1984 MAR 0.5	0.99	159.8	0.0	341.3	-7.9	0.73	273.5	-1.01	322.6	0.0	1.45
45770.0	1984 MAR 10.5	C.99	169.8	0.0	350.6	-4.0	0.73	289.4	-1.85	338.4	0.0	1.49
45780.0	1984 MAR 20.5	1.00	179.7	0.0	359.8	-0.1	0.73	305.2	-2.56	354.2	0.0	1.54
45790.0	1984 MAR 30.5	1.00	189.6	0.0	8.9	3.8	0.73	321.0	-3.07	10.0	0.0	1.58
45800.0	1984 APR 9.5	1.00	199.5	0.0	18.0	7.6	0.73	336.8	-3.35	25.8	0.0	1.61
45810.0	1984 APR 19.5	1.00	209.3	0.0	27.2	11.2	0.73	352.7	-3.37	41.7	0.0	1.65
45820.0	1984 APR 29.5	1.01	219.0	0.0	36.6	14.5	0.73	8.6	-3.14	57.6	0.0	1.67
45830.0	1984 MAY 9.5	1.01	228.7	0.0	46.3	17.4	0.72	24.6	-2.67	73.5	0.0	1.70
45840.0	1984 MAY 19.5	1.01	238.3	0.0	56.1	19.8	0.72	40.5	-1.99	89.5	0.0	1.71

TABLE 2-3. PLANETARY EPHEMERIDES (Concluded)

PLANETARY EPHEMERIS
HELIOCENTRIC ECLIPTIC/MEAN EQUINOX OF DATE

	DATE	EARTH R	EARTH LONG	EARTH LAT	EARTH RAS	EARTH DECS	VENUS R	VENUS LONG	VENUS LAT	VENUS RAS	VENUS DECS	VENUS DIST
45850.0	1984 MAY 29.5	1.01	248.0	0.0	66.2	21.6	0.72	56.6	-1.15	105.5	0.0	1.73
45860.0	1984 JUN 8.5	1.02	257.5	0.0	76.5	22.9	0.72	72.7	-0.22	121.6	0.0	1.73
45870.0	1984 JUN 18.5	1.02	267.1	0.0	86.8	23.4	0.72	88.8	0.73	137.8	0.0	1.74
45880.0	1984 JUN 28.5	1.02	276.6	0.0	97.2	23.3	0.72	105.0	1.63	154.0	0.0	1.73
45890.0	1984 JUL 8.5	1.02	286.2	0.0	107.5	22.5	0.72	121.2	2.40	170.2	0.0	1.72
45900.0	1984 JUL 18.5	1.02	295.7	0.0	117.7	21.0	0.72	137.4	2.97	186.5	0.0	1.70
45910.0	1984 JUL 28.5	1.02	305.2	0.0	127.6	19.0	0.72	153.7	3.31	202.7	0.0	1.68
45920.0	1984 AUG 7.5	1.01	314.8	0.0	137.3	16.4	0.72	169.9	3.39	218.9	0.0	1.65
45930.0	1984 AUG 17.5	1.01	324.4	0.0	146.7	13.4	0.72	186.1	3.19	235.1	0.0	1.62
45940.0	1984 AUG 27.5	1.01	334.1	0.0	156.0	10.0	0.72	202.3	2.75	251.2	0.0	1.58
45950.0	1984 SEP 6.5	1.01	343.7	0.0	165.0	6.4	0.72	218.3	2.09	267.3	0.0	1.54
45960.0	1984 SEP 16.5	1.01	353.5	0.0	174.0	2.6	0.72	234.3	1.27	283.3	0.0	1.50
45970.0	1984 SEP 26.5	1.00	3.2	0.0	183.0	-1.3	0.73	250.2	0.36	299.2	0.0	1.45
45980.0	1984 OCT 6.5	1.00	13.1	0.0	192.0	-5.2	0.73	266.1	-0.58	315.1	0.0	1.40
45990.0	1984 OCT 16.5	1.00	23.0	0.0	201.2	-8.9	0.73	281.9	-1.47	331.0	0.0	1.34
46000.0	1984 OCT 26.5	0.99	32.9	0.0	210.7	-12.5	0.73	297.7	-2.25	346.8	0.0	1.28
46010.0	1984 NOV 5.5	0.99	42.9	0.0	220.5	-15.7	0.73	313.6	-2.86	2.6	0.0	1.22
46020.0	1984 NOV 15.5	0.99	53.0	0.0	230.6	-18.5	0.73	329.4	-3.25	18.4	0.0	1.16
46030.0	1984 NOV 25.5	0.99	63.1	0.0	241.1	-20.8	0.73	345.2	-3.39	34.2	0.0	1.10
46040.0	1984 DEC 5.5	0.99	73.2	0.0	251.8	-22.4	0.73	1.1	-3.28	50.1	0.0	1.03
46050.0	1984 DEC 15.5	0.98	83.4	0.0	262.9	-23.3	0.73	17.1	-2.92	66.0	0.0	0.96
46060.0	1984 DEC 25.5	0.98	93.6	0.0	273.9	-23.4	0.72	33.0	-2.33	82.0	0.0	0.89
46070.0	1985 JAN 4.5	0.98	103.7	0.0	285.0	-22.7	0.72	49.0	-1.56	98.0	0.0	0.82
46080.0	1985 JAN 14.5	0.98	113.9	0.0	295.9	-21.3	0.72	65.1	-0.66	114.1	0.0	0.74
46090.0	1985 JAN 24.5	0.98	124.1	0.0	306.5	-19.2	0.72	81.2	0.29	130.2	0.0	0.67
46100.0	1985 FEB 3.5	0.99	134.3	0.0	316.8	-16.5	0.72	97.4	1.22	146.4	0.0	0.60
46110.0	1985 FEB 13.5	0.99	144.4	0.0	326.7	-13.4	0.72	113.6	2.06	162.6	0.0	0.52
46120.0	1985 FEB 23.5	0.99	154.5	0.0	336.4	-9.9	0.72	129.8	2.73	178.8	0.0	0.45
46130.0	1985 MAR 5.5	0.99	164.5	0.0	345.8	-6.1	0.72	146.1	3.18	195.1	0.0	0.39
46140.0	1985 MAR 15.5	0.99	174.5	0.0	355.0	-2.2	0.72	162.3	3.39	211.3	0.0	0.33
46150.0	1985 MAR 25.5	1.00	184.4	0.0	4.1	1.8	0.72	178.5	3.32	227.5	0.0	0.29
46160.0	1985 APR 4.5	1.00	194.3	0.0	13.2	5.7	0.72	194.7	2.99	243.6	0.0	0.28
46170.0	1985 APR 14.5	1.00	204.1	0.0	22.4	9.4	0.72	210.8	2.42	259.7	0.0	0.30
46180.0	1985 APR 24.5	1.01	213.9	0.0	31.7	12.8	0.72	226.8	1.67	275.8	0.0	0.34
46190.0	1985 MAY 4.5	1.01	223.6	0.0	41.2	15.9	0.73	242.8	0.80	291.7	0.0	0.40
46200.0	1985 MAY 14.5	1.01	233.3	0.0	50.9	18.6	0.73	258.7	-0.14	307.7	0.0	0.47
46210.0	1985 MAY 24.5	1.01	242.9	0.0	60.9	20.7	0.73	274.5	-1.06	323.5	0.0	0.55
46220.0	1985 JUN 3.5	1.01	252.5	0.0	71.1	22.3	0.73	290.3	-1.90	339.4	0.0	0.63
46230.0	1985 JUN 13.5	1.02	262.1	0.0	81.4	23.2	0.73	306.1	-2.59	355.2	0.0	0.71
46240.0	1985 JUN 23.5	1.02	271.6	0.0	91.8	23.4	0.73	321.9	-3.09	11.0	0.0	0.79
46250.0	1985 JUL 3.5	1.02	281.1	0.0	102.1	23.0	0.73	337.8	-3.36	26.8	0.0	0.87
46260.0	1985 JUL 13.5	1.02	290.7	0.0	112.4	21.8	0.73	353.7	-3.37	42.6	0.0	0.94
46270.0	1985 JUL 23.5	1.02	300.2	0.0	122.4	20.1	0.73	9.6	-3.12	58.5	0.0	1.02
46280.0	1985 AUG 2.5	1.01	309.8	0.0	132.2	17.8	0.72	25.5	-2.63	74.5	0.0	1.09
46290.0	1985 AUG 12.5	1.01	319.4	0.0	141.8	15.0	0.72	41.5	-1.94	90.4	0.0	1.16
46300.0	1985 AUG 22.5	1.01	329.0	0.0	151.1	11.8	0.72	57.5	-1.09	106.5	0.0	1.23
46310.0	1985 SEP 1.5	1.01	338.6	0.0	160.3	8.3	0.72	73.6	-0.16	122.6	0.0	1.29
46320.0	1985 SEP 11.5	1.01	348.3	0.0	169.3	4.6	0.72	89.8	0.79	138.8	0.0	1.35
46330.0	1985 SEP 21.5	1.00	358.1	0.0	178.3	0.8	0.72	106.0	1.68	155.0	0.0	1.40
46340.0	1985 OCT 1.5	1.00	7.9	0.0	187.3	-3.1	0.72	122.2	2.44	171.2	0.0	1.45
46350.0	1985 OCT 11.5	1.00	17.8	0.0	196.4	-7.0	0.72	138.4	3.00	187.5	0.0	1.50
46360.0	1985 OCT 21.5	1.00	27.7	0.0	205.7	-10.7	0.72	154.7	3.32	203.7	0.0	1.54
46370.0	1985 NOV 0.5	0.99	37.7	0.0	215.3	-14.1	0.72	170.9	3.38	219.9	0.0	1.57
46380.0	1985 NOV 10.5	0.99	47.7	0.0	225.2	-17.1	0.72	187.1	3.17	236.1	0.0	1.61
46390.0	1985 NOV 20.5	0.99	57.8	0.0	235.5	-19.7	0.72	203.2	2.71	252.2	0.0	1.63
46400.0	1985 DEC 0.5	0.99	67.9	0.0	246.1	-21.6	0.72	219.3	2.05	268.2	0.0	1.66
46410.0	1985 DEC 10.5	0.98	78.0	0.0	257.0	-22.9	0.72	235.3	1.22	284.2	0.0	1.68
46420.0	1985 DEC 20.5	0.98	88.2	0.0	268.1	-23.4	0.73	251.2	0.30	300.2	0.0	1.69
46430.0	1985 DEC 30.5	0.98	98.4	0.0	279.2	-23.2	0.73	267.1	-0.63	316.1	0.0	1.70
46440.0	1986 JAN 9.5	0.98	108.6	0.0	290.1	-22.2	0.73	282.9	-1.52	331.9	0.0	1.71
46450.0	1986 JAN 19.5	0.98	118.8	0.0	300.9	-20.4	0.73	298.7	-2.29	347.7	0.0	1.71
46460.0	1986 JAN 29.5	0.98	128.9	0.0	311.4	-18.0	0.73	314.5	-2.89	3.5	0.0	1.71
46470.0	1986 FEB 8.5	0.99	139.1	0.0	321.5	-15.1	0.73	330.3	-3.26	19.4	0.0	1.71
46480.0	1986 FEB 18.5	0.99	149.2	0.0	331.3	-11.8	0.73	346.2	-3.39	35.2	0.0	1.70
46490.0	1986 MAR 0.5	0.99	159.3	0.0	340.8	-8.1	0.73	2.1	-3.27	51.0	0.0	1.68
46500.0	1986 MAR 10.5	0.99	169.3	0.0	350.1	-4.2	0.73	18.0	-2.89	67.0	0.0	1.67
46510.0	1986 MAR 20.5	1.00	179.2	0.0	359.3	-0.3	0.72	34.0	-2.29	82.9	0.0	1.64
46520.0	1986 MAR 30.5	1.00	189.1	0.0	8.4	3.6	0.72	50.0	-1.51	99.0	0.0	1.62
46530.0	1986 APR 9.5	1.00	199.0	0.0	17.5	7.4	0.72	66.1	-0.61	115.0	0.0	1.58
46540.0	1986 APR 19.5	1.00	208.8	0.0	26.8	11.0	0.72	82.2	0.35	131.2	0.0	1.55
46550.0	1986 APR 29.5	1.01	218.5	0.0	36.2	14.4	0.72	98.3	1.27	147.4	0.0	1.50
46560.0	1986 MAY 9.5	1.01	228.2	0.0	45.8	17.3	0.72	114.5	2.10	163.6	0.0	1.46
46570.0	1986 MAY 19.5	1.01	237.9	0.0	55.6	19.7	0.72	130.8	2.76	179.8	0.0	1.40
46580.0	1986 MAY 29.5	1.01	247.5	0.0	65.7	21.6	0.72	147.0	3.20	196.1	0.0	1.34
46590.0	1986 JUN 8.5	1.02	257.0	0.0	75.9	22.8	0.72	163.3	3.39	212.3	0.0	1.28
46600.0	1986 JUN 18.5	1.02	266.6	0.0	86.3	23.4	0.72	179.5	3.31	228.5	0.0	1.22

Section 3

DIRECT MISSIONS

One-way direct trajectory data for Mercury missions in the years 1973-1985 are presented in this section. There is a launch opportunity associated with each of the conjunctions listed in Table 2-2. Hence, there are three (and sometimes four) launch opportunities to Mercury in a calendar year. Generally, the first launch opportunity is optimum (in terms of minimum propulsive energy required) for orbiter missions, and the third opportunity is optimum for flyby missions. The third opportunity usually yields minimum Earth departure energy trajectories due to arrivals occurring near aphelion at low inclination. The contour chart data in this handbook have been limited to the third launch opportunity since it is likely that missions to Mercury in the immediate future will be limited to flyby encounters. For reference purposes, trajectory data for the other launch opportunities are presented in Table 3-1. The table contains characteristics of the minimum Earth departure energy ΔV trajectories for the first, second, and (where applicable) fourth opportunities. In this table distances are given in AU, angles in degrees, excess speeds in EMOS, and ΔV in km/sec.

Mission Characteristics

The characteristics of Earth-Mercury missions are essentially repeated at 13-year intervals (4750 days). That is, flight times and energy requirements for the 1973 opportunity, for example, will essentially be the same as those occurring in 1986. For this reason, data is shown in this handbook for the 1973-1985 cycle. Within each calendar year of this cycle there are three (and occasionally four) launch opportunities. These recur at intervals of about 116 days with the regions of lowest Earth departure energy occurring near the date of inferior conjunction. The flight time and energy characteristics of each launch opportunity are dependent, primarily, on the position of Mercury at arrival. Due to the relatively large orbital eccentricity (0.206), inclination (7.0°), and mean motion (4.0°/day) of Mercury's orbit, this dependence is far more pronounced for missions to Mercury than it is for most solar system targets.

An estimation of the effects of eccentricity can be obtained by comparing the departure and arrival excess speeds for Hohmann transfers to Mercury's aphelion and perihelion:

to aphelion: 0.02 EMOS departure, 0.405 EMOS arrival
to perihelion: 0.314 EMOS departure, 0.250 EMOS arrival.

TABLE 3-1

ALTERNATE LAUNCH OPPORTUNITIES TO MERCURY

Minimum Earth Departure ΔV Trajectory

LAUNCH YEAR	CONJ.	JULIAN DATE (-2400000.0)		EARTH				HELIOCENTRIC				MERCURY					
		DEPART	ARRIVE	ΔV^{**}	V_∞	RA	DECL	TYPE	INCL	CDIST	PERIH	RAS	LAMDA	RA	DECL	V_∞	ΔV^{**}
1973	1	41815	41908	6.66	.314	130.6	8.2	I	4.4	1.02	0.32*	145.1	68.5	32.3	-19.1	.307	7.30
	2	41914	42028	5.94	.275	231.9	-27.3	II	3.1	1.28	0.36	308.4	48.7	168.2	30.8	.468	11.88
1974	1	42160	42261	6.59	.310	123.2	19.2	II	0.4	1.11	0.31	151.9	43.2	4.5	-30.0	.509	13.06
	2	42264	42376	6.27	.293	215.9	-26.3	II	4.7	1.29	0.34	294.9	47.3	151.8	32.1	.459	11.62
1975	1	42499	42591	6.40	.300	95.5	3.1	I	8.2	0.71	0.36*	51.7	132.9	71.9	22.5	.430	10.76
	2	42617	42726	6.62	.311	202.1	-21.8	II	5.3	1.31	0.31	287.9	38.6	135.8	27.8	.479	12.19
1976	1	42843	42936	6.05	.281	76.4	3.6	I	7.1	0.68	0.38*	30.3	134.6	351.1	25.2	.495	12.66
	2	42966	43073	6.95	.329	187.0	-19.1	II	7.2	1.29	0.30	267.8	38.6	115.3	28.2	.457	11.55
1977	1	43187	43283	5.71	.262	56.8	0.2	I	6.4	0.69	0.41*	16.2	129.9	333.8	29.5	.524	13.50
	2	43312	43406	6.76	.319	178.8	5.9	I	2.4	0.90	0.30*	160.4	125.8	126.0	-44.8	.484	12.33
1978	1	43531	43629	5.43	.245	36.6	-1.7	I	4.8	0.70	0.43*	359.9	131.7	319.3	28.7	.566	14.71
	2	43660	43756	6.60	.311	161.5	6.4	I	0.6	0.92	0.31*	149.0	114.8	93.0	-41.5	.367	8.97
	4	43879	43978	5.22	.232	15.5	-9.5	I	4.3	0.75	0.44*	352.0	125.0	304.5	31.9	.553	14.34
1979	1	44010	44108	6.49	.305	145.3	11.2	I	1.1	1.00	0.31*	149.7	80.9	47.5	-41.1	.342	8.28
	2	44113	44228	5.77	.265	240.3	-28.9	II	3.0	1.26	0.37	310.9	54.6	177.3	32.8	.457	11.55
1980	1	44360	44460	6.51	.306	131.7	19.3	II	0.6	1.07	0.31	150.4	56.2	14.3	-39.4	.456	11.53
	2	44465	44578	6.08	.283	225.3	-26.4	II	3.6	1.29	0.35	304.7	46.4	161.6	30.3	.471	11.97
1981	1	44703	44794	6.57	.309	105.8	2.9	I	8.4	0.73	0.34*	64.8	133.2	21.1	18.7	.395	9.78
	2	44816	44926	6.41	.301	209.0	-24.7	II	5.2	1.30	0.33	290.8	45.0	145.0	31.4	.462	11.71
1982	1	45046	45139	6.25	.292	87.8	3.4	I	7.8	0.69	0.37*	41.7	133.8	1.1	24.1	.461	11.66
	2	45166	45274	6.76	.319	194.5	-21.7	II	6.7	1.29	0.31	275.4	42.4	126.3	30.6	.454	11.46
1983	1	45391	45484	5.90	.273	67.9	3.9	I	6.3	0.66	0.39*	21.3	136.5	344.4	24.9	.527	13.58
	2	45513	45606	6.88	.325	188.2	3.5	I	3.2	0.88	0.29*	165.3	133.0	139.9	-41.0	.544	14.07
1984	1	45735	45831	5.58	.254	47.9	0.5	I	5.4	0.68	0.41*	7.6	132.9	328.0	27.9	.553	14.34
	2	45861	45956	6.70	.316	171.5	5.2	I	0.7	0.90	0.30*	153.6	124.2	112.9	-42.0	.425	10.71
	4	46080	46178	5.33	.239	27.4	-3.0	I	4.0	0.71	0.43*	354.1	132.1	313.5	28.0	.575	14.98
1985	1	46211	46308	6.55	.308	156.4	14.3	I	1.9	0.97	0.31*	154.4	94.0	71.5	-55.5	.409	10.19
	2	46315	46430	5.61	.256	249.7	-27.1	II	1.7	1.25	0.38	319.7	53.0	185.7	29.9	.466	11.81

*Perihelion not transited
CONJ = Conjunction
RA = Asymptote Right Ascension
DECL = Asymptote Declination

**Altitude of 185 km at Earth; 1000 km Mercury
TYPE = Transfer Trajectory Type
INCL = Inclination To Ecliptic
CDIST = Communication Distance

PERIH = Perihelion Distance
RAS = Right Ascension of Sun at Mercury Arrival
LAMDA = Approach Asymptote Illumination Angle

Assuming that the arrival ΔV at Mercury is essentially equal to the excess speed (due to the small mass of Mercury) and that the Earth departure ΔV for arrival when Mercury is at aphelion and perihelion is respectively, 4.8 km/sec and 6.7 km/sec, two facts are evident. Arrival should be at aphelion to minimize the departure ΔV for flyby missions to Mercury. On the other hand, if the mission is an orbiter, then arrival should occur when Mercury is at perihelion since this minimizes the total ΔV requirement. The difference between departure ΔV's is about 1.9 km/sec (in favor of aphelion) and the difference between total ΔV's is about 2.7 km/sec (in favor of perihelion arrival). In reality, Hohmann transfers are possible only to the nodes of Mercury's orbit; however, these are relatively near the apsides and the results above are still valid.

An unambiguous example of the effects of Mercury's orbit inclination on departure energy is difficult to obtain. An estimation of the effects can be made by determining the change in excess speed required to rotate some specified heliocentric velocity from coincidence with the Earth's velocity to a desired inclination. This change in excess speed is greatest for the lower energy trajectories. The effect of inclination is significant because the date of arrival corresponding to the minimum departure energy falls very near the date of nodal crossing for the launch opportunities included in this handbook. This is not necessarily the case for all other opportunities, as explained below. On the average, the difference between the nodal crossing date and the date of minimum departure energy is about 2 days (with a maximum of about 4 days) for the 13 yearly launch opportunities presented in this handbook.

Another example of the effects of eccentricity and inclination can be seen in Figure 3-1. This is a plot of the heliocentric longitude and distance from the Sun of Mercury at arrival for the minimum energy trajectories of the launch opportunities of each calendar year from 1973 through 1985. The missions are numbered consecutively from 1 to 13 with 1 corresponding to 1973, 2 to 1974, etc. Clearly illustrated on this figure is the clustering of the arrivals of the third launch opportunity near the descending node, $\mho_{\mathrm{☿}}$. Also, with the exception of the arrivals near the ascending node, $\Omega_{\mathrm{☿}}$, there is a large angular range of Mercury position with no minimum energy trajectories. This extends to about 100° on either side of the ascending node. Both of these factors are related to Mercury's eccentricity and inclination. Another interesting characteristic, as can be seen in the positions of Mercury, is a lower order cycle

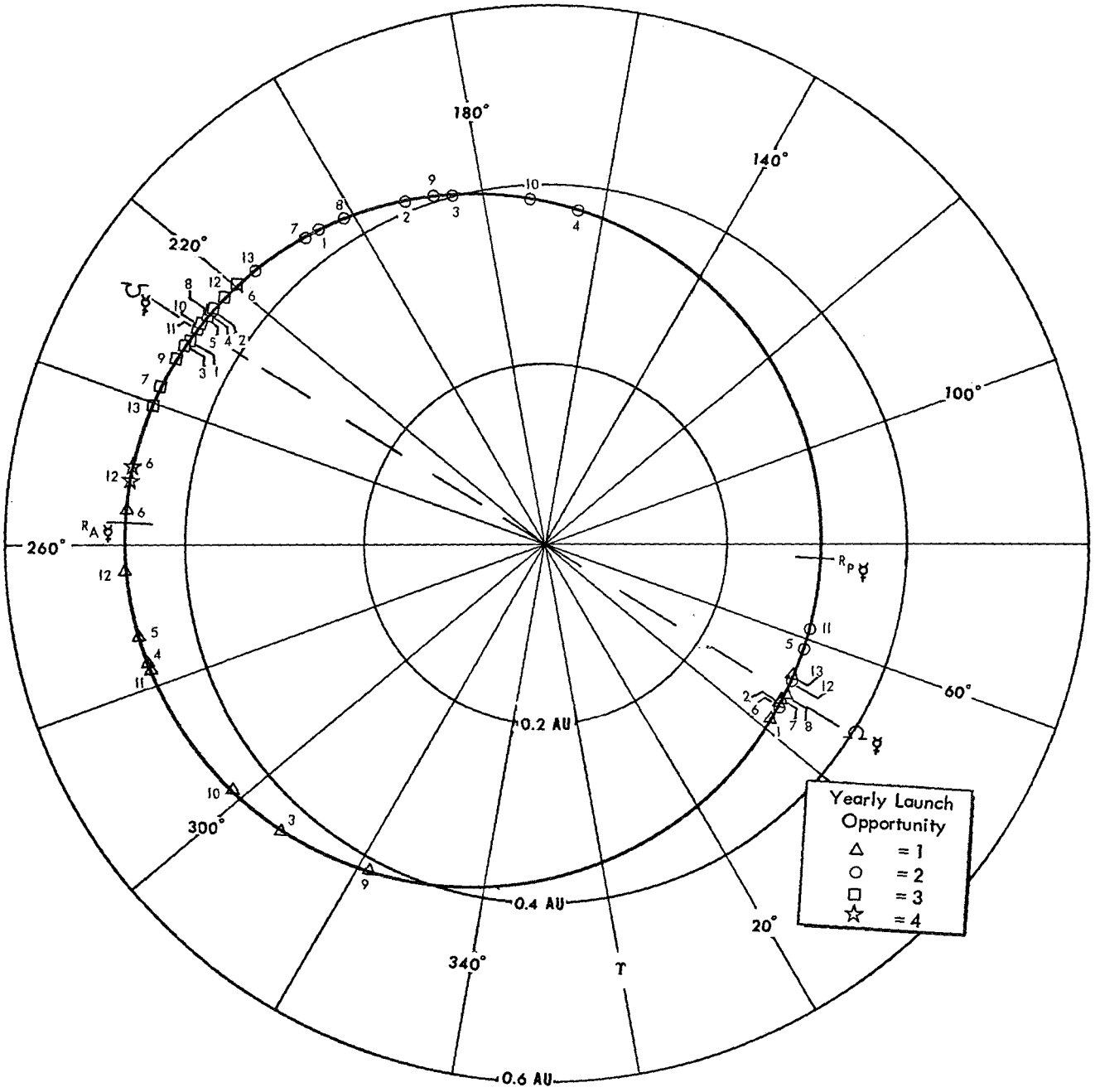


FIGURE 3-1 LONGITUDES OF MERCURY ARRIVAL,
EARTH-MERCURY MINIMUM DEPARTURE ENERGY TRAJECTORIES

of about 6 years length which is a rough repetition of the planetary positions (but not as exact as the 13-year cycle).

Considering only the trajectories associated with the first launch opportunity of each year, the location of Earth in 1973 and 1974 is near the descending node of Mercury. This provides the opportunity for near 180^{o} transfers to the ascending node. The bias is in favor of transfer to the node at low inclination as opposed to the normally more favorable energy requirement associated with transfer to a slightly larger radius at higher inclination. As Earth moves in the succeeding years of the lower order 6-year cycle, the location of Mercury at arrival for minimum energy missions moves toward aphelion. The characteristics of the available transfer trajectories are such that the effect of eccentricity (i.e., larger radius at arrival) on departure energy requirements dominates any advantage of a transfer to the descending node which is near perihelion.

For trajectories in the second yearly launch opportunity the situation is much the same as it is for the first except that the order is reversed. The minimum energy trajectories during the first four years of the lower order 6-year cycle are characterized by arrival at Mercury at relatively large radius values (but away from aphelion) and (for some cases) high latitudes. However, for the fifth and six years, arrival occurs at the ascending node. This is again a result of the energy advantage gained by shifting to a transfer to the node as opposed to transfer to a slightly larger radius at a high latitude.

The location of Earth for minimum energy departure in the third yearly launch opportunity is near the ascending node of Mercury. This would normally cause the minimum energy trajectories to arrive near Mercury's aphelion. However, instead of spreading out over the region near aphelion, the arrival locations cluster near the descending node. This seems to be the result of two factors discussed earlier:

1. the trajectories of lowest departure energy arrive near aphelion; and
2. the effect of Mercury arrival latitude (i.e. transfer inclination) is greatest for the lowest energy trajectories.

Thus, the location of Mercury's descending node near aphelion would act to produce a pronounced bias for the minimum departure energy trajectories to arrive near the descending node. For opportunities in the latter part of

the 6-year cycle, the clockwise progression of arrival locations would normally shift the arrival toward smaller radii, increased inclination, and higher departure energies. However, the energy advantages of the nodal transfer are still sufficient to prevent any significant shift and the arrival locations remain near the node.

A fourth launch opportunity occurs in 1978 and 1984. Mercury is near the descending node at arrival so that this launch opportunity is best for flyby missions as opposed to orbiter missions.

Earth-Mercury Mission Contour Charts

The contour charts, Figures 3-2 through 3-14, provide the means to ascertain regions of interest within a particular launch opportunity and to determine the gross variations of energy requirements as a function of launch year. The charts show contours of constant Earth departure and Mercury arrival excess speed (normalized to 0.1 Earth's mean orbital speed) as a function of the date of Earth departure and Mercury arrival. The 180° transfer ridge (the locus of points for which the Earth longitude/Mercury longitude differ by 180°) is denoted by the heavy solid line running diagonally up each chart. The small circle that appears on this line in each launch opportunity indicates the date of nodal crossing by Mercury, i.e., the date on which Mercury penetrates the ecliptic plane. The date of inferior conjunction coinciding with the Earth departure window is given in the legend at the top of each curve.

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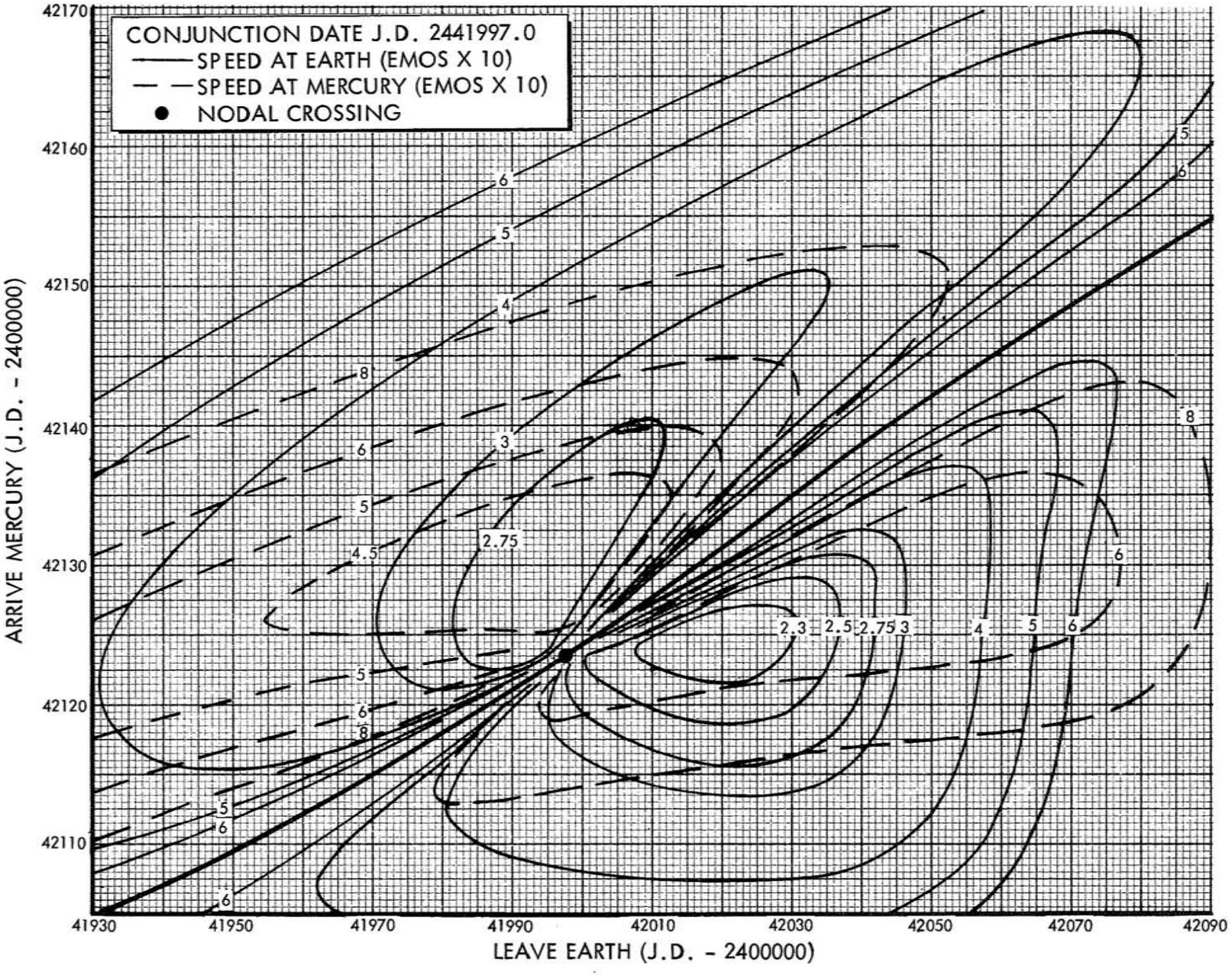


FIGURE 3-2 EARTH-MERCURY TRANSFER (1973)

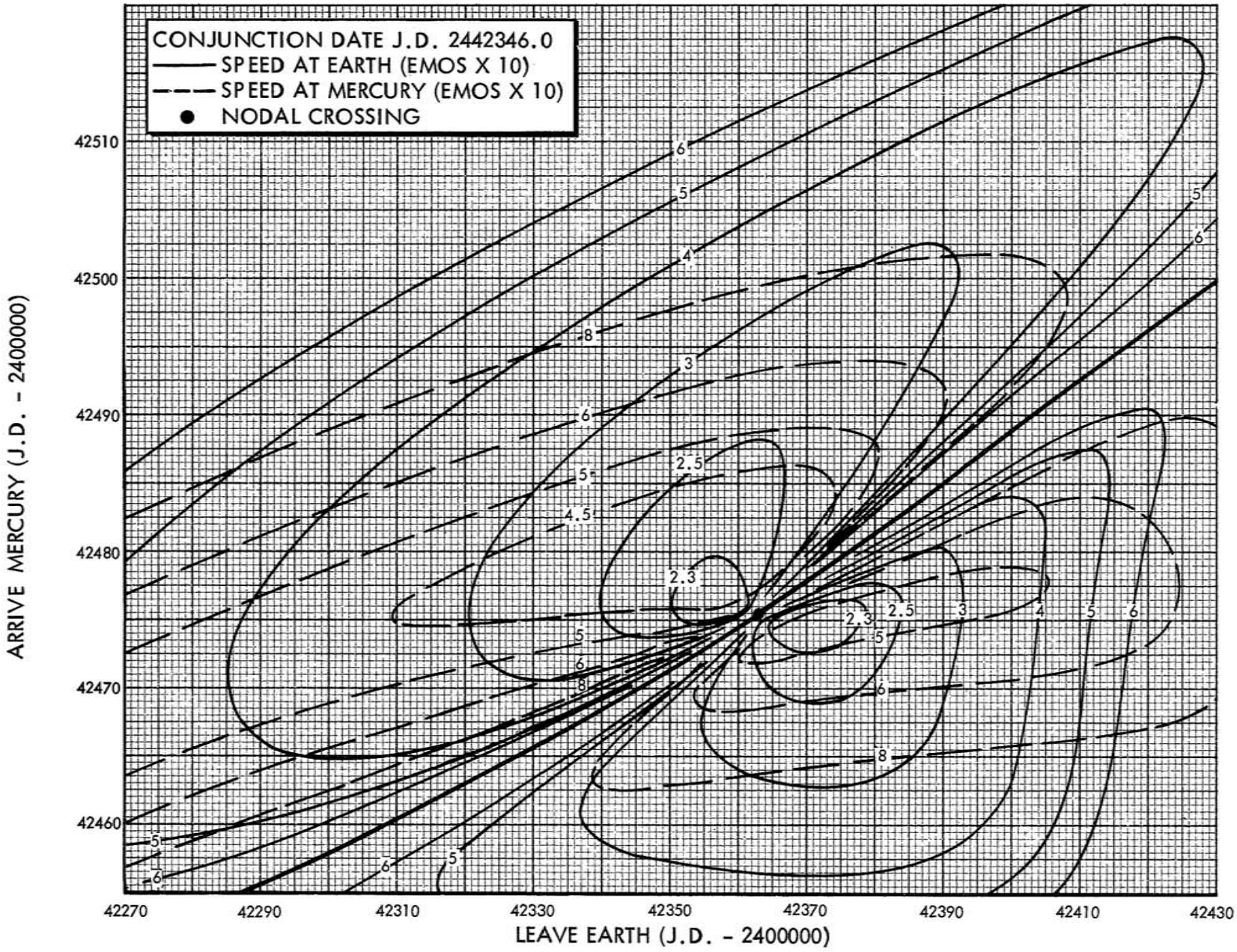


FIGURE 3-3 EARTH-MERCURY TRANSFER (1974)

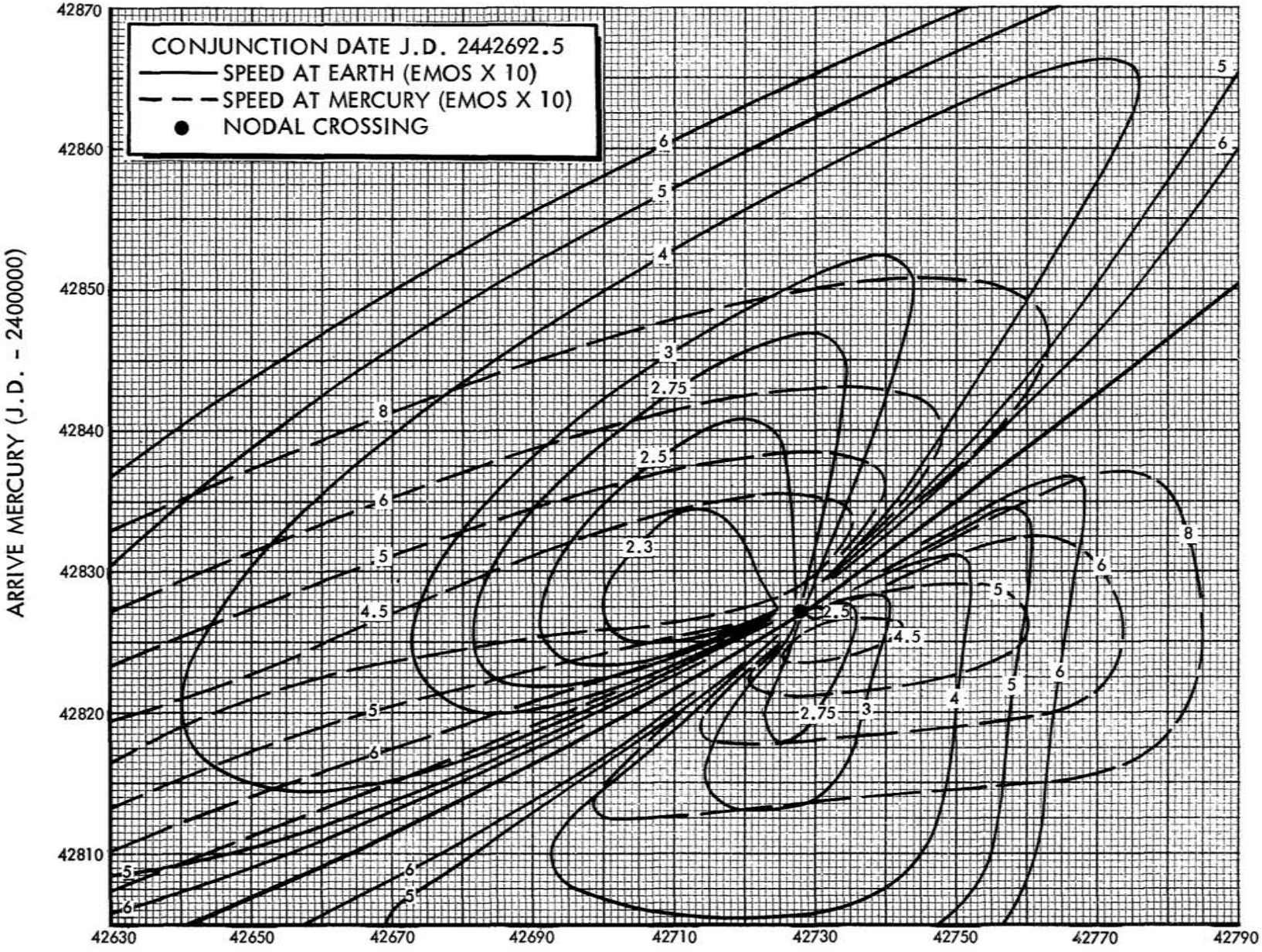


FIGURE 3-4 EARTH-MERCURY TRANSFER (1975)

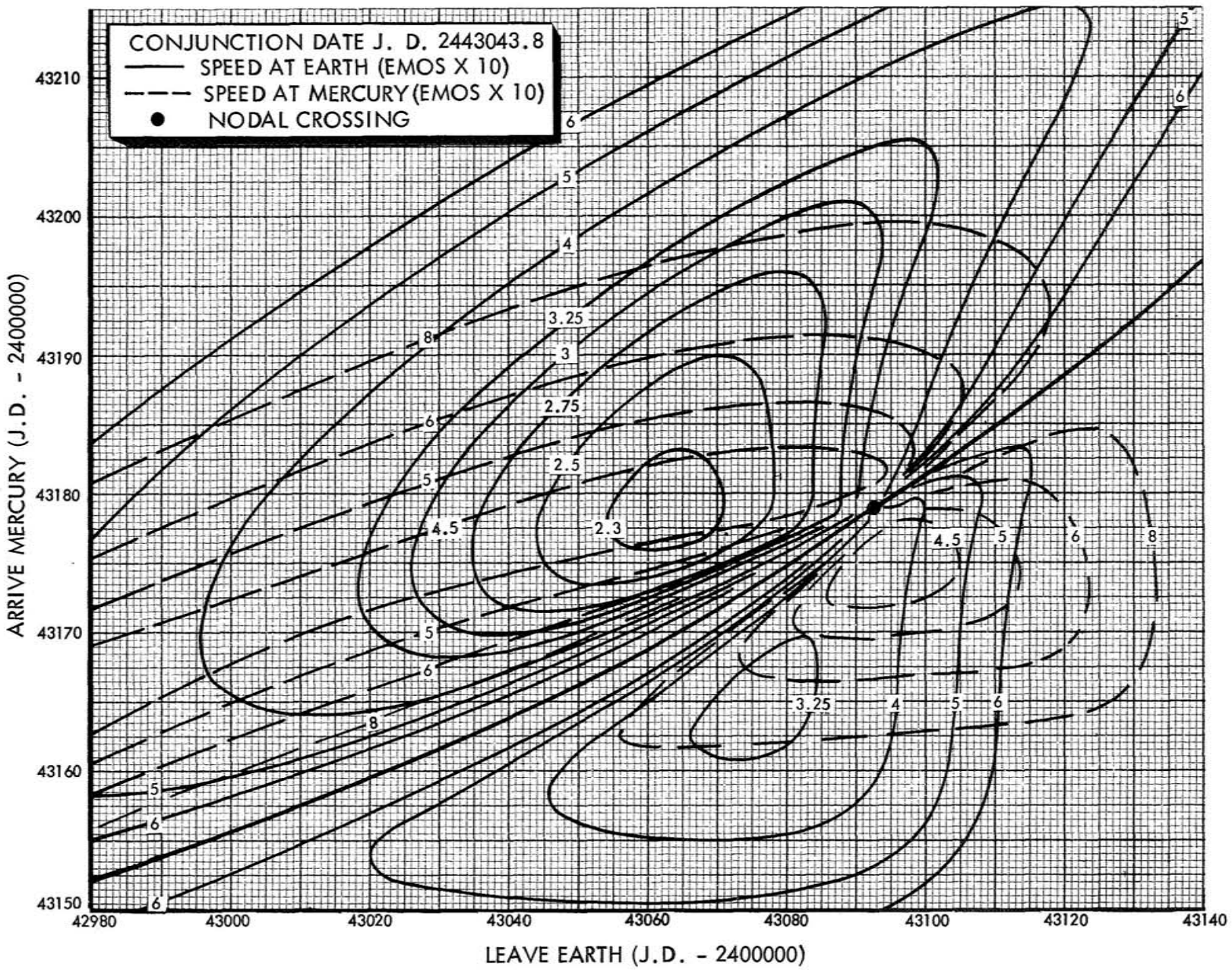


FIGURE 3-5 EARTH-MERCURY TRANSFER (1976)

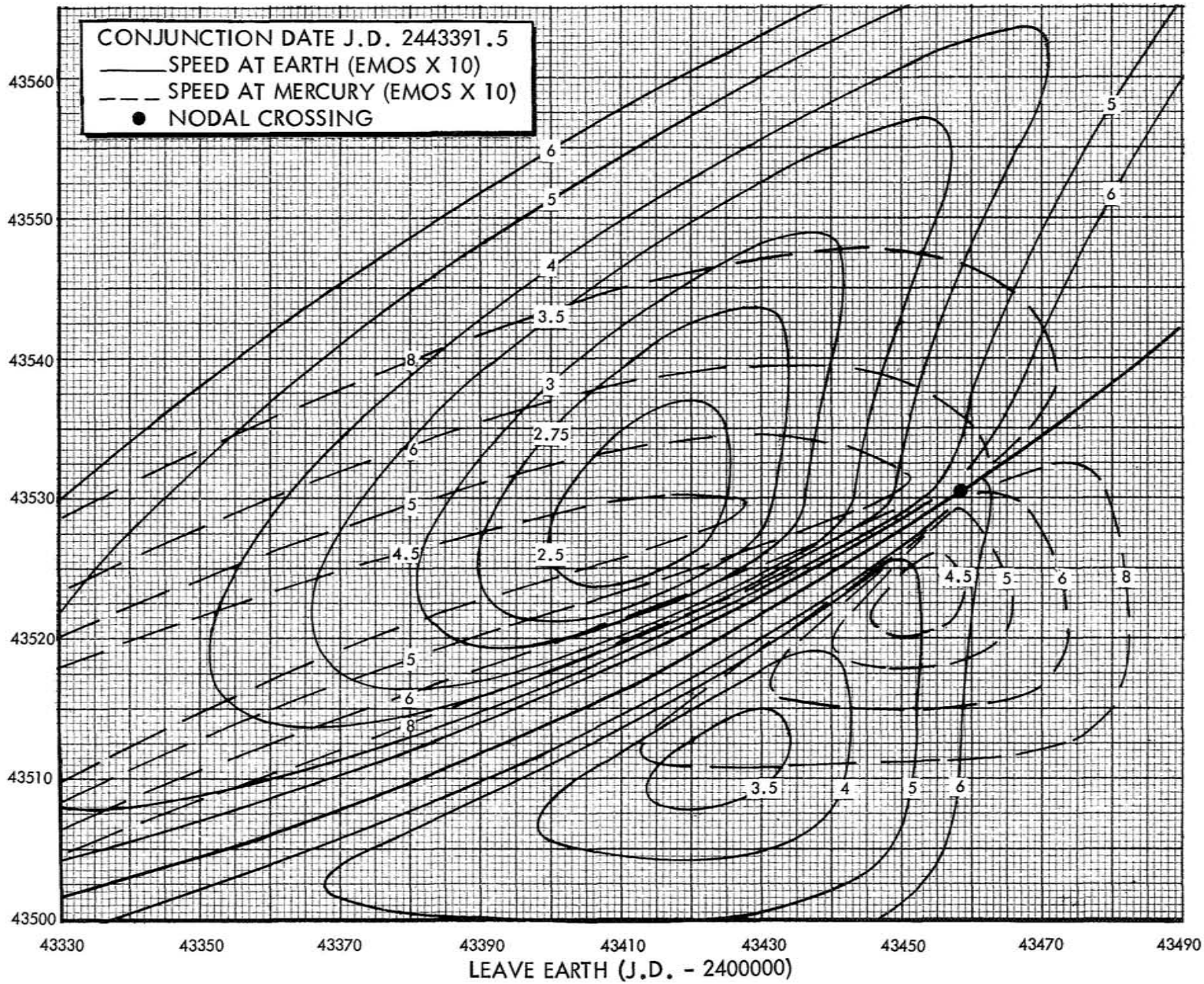


FIGURE 3-6 EARTH-MERCURY TRANSFER (1977)

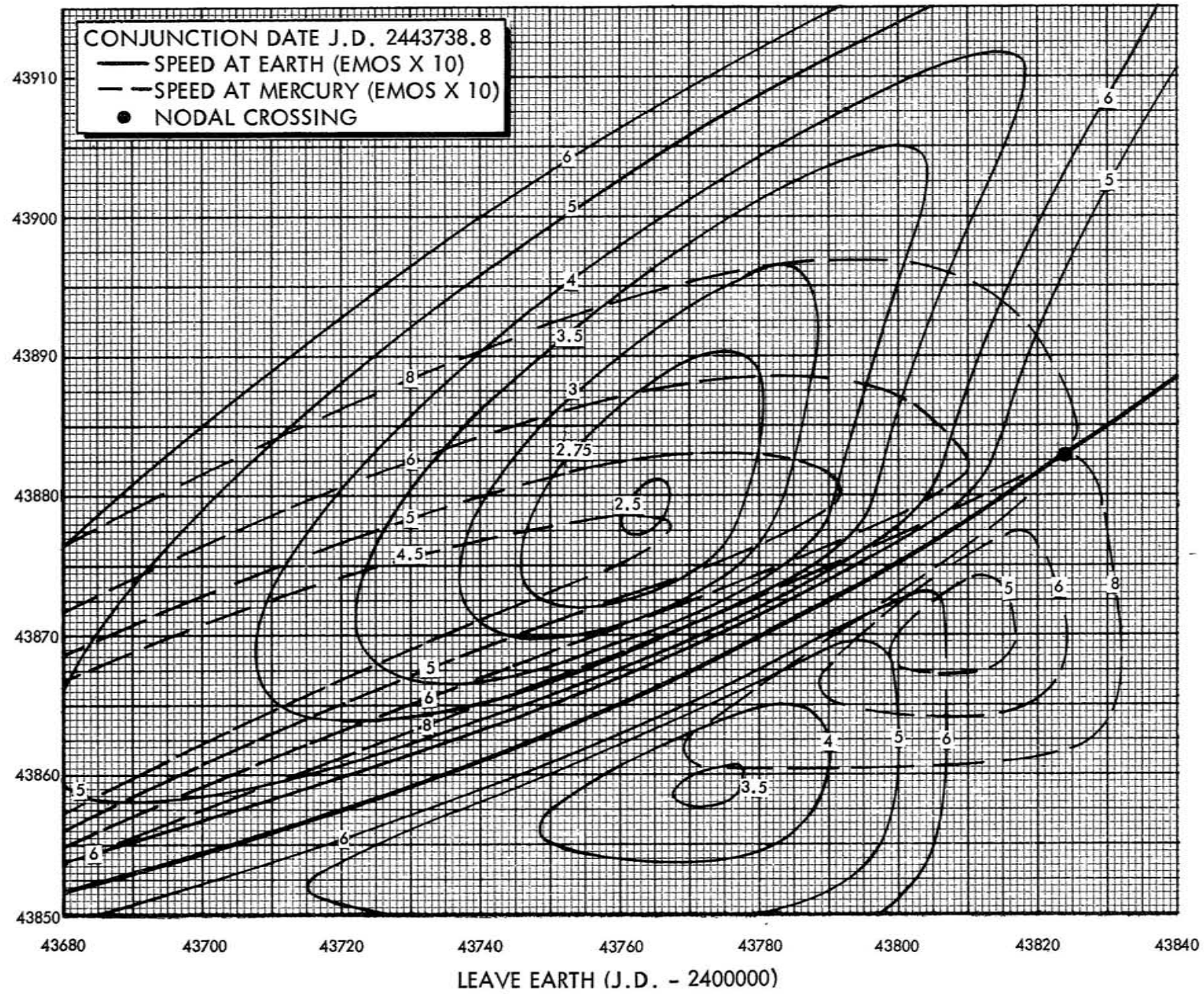


FIGURE 3-7 EARTH-MERCURY TRANSFER (1978)

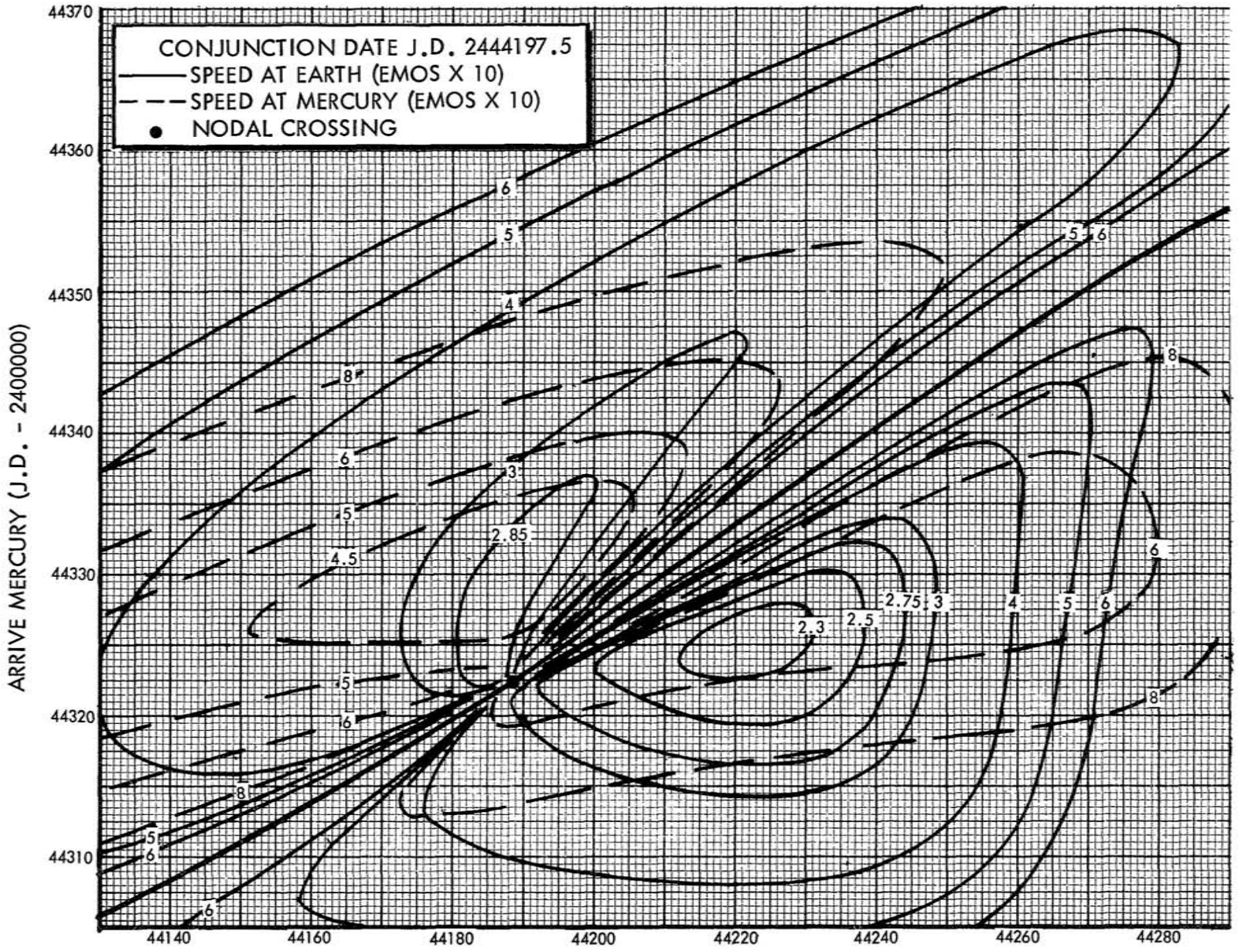


FIGURE 3-8 EARTH-MERCURY TRANSFER (1979)

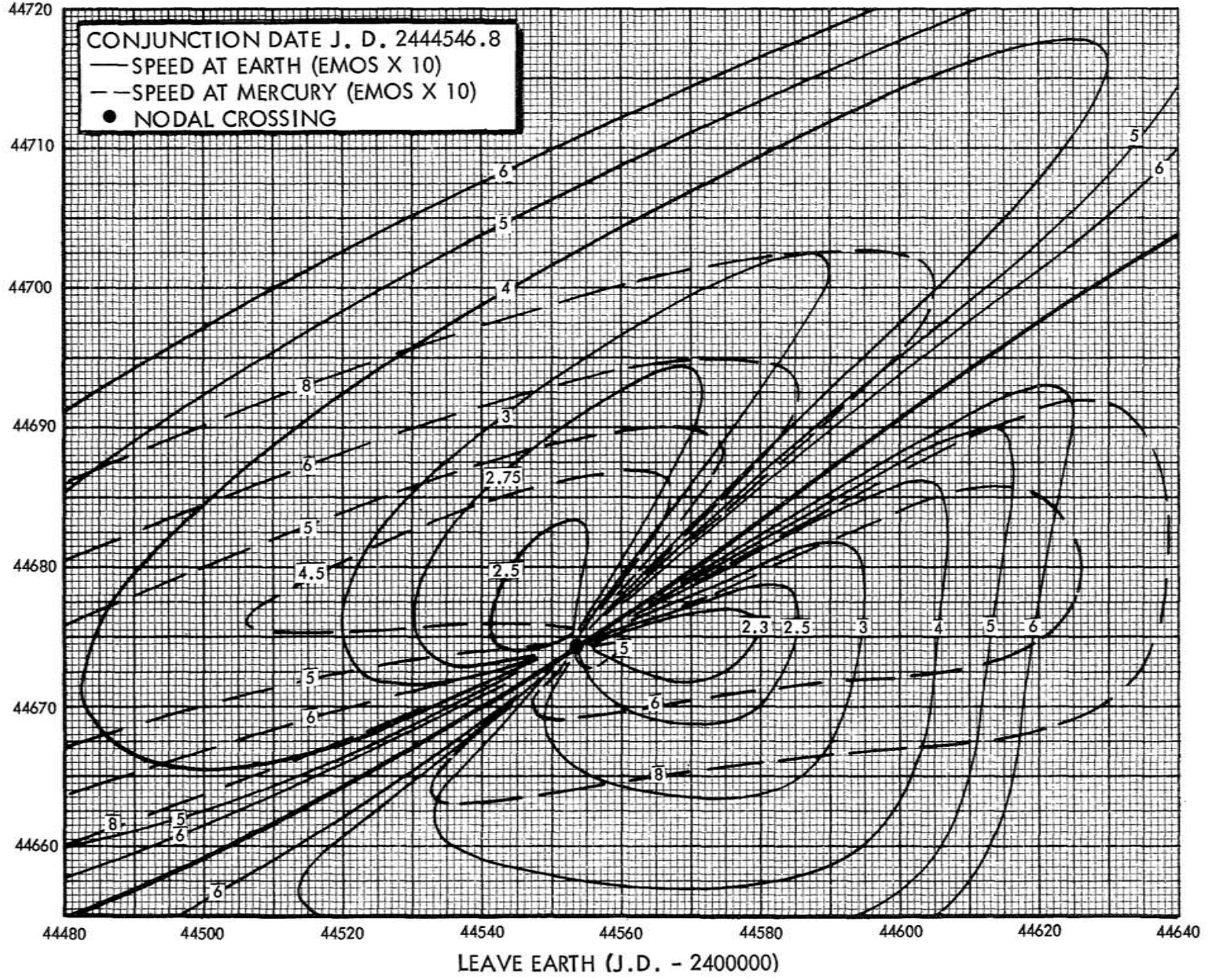


FIGURE 3-9 EARTH-MERCURY TRANSFER (1980)

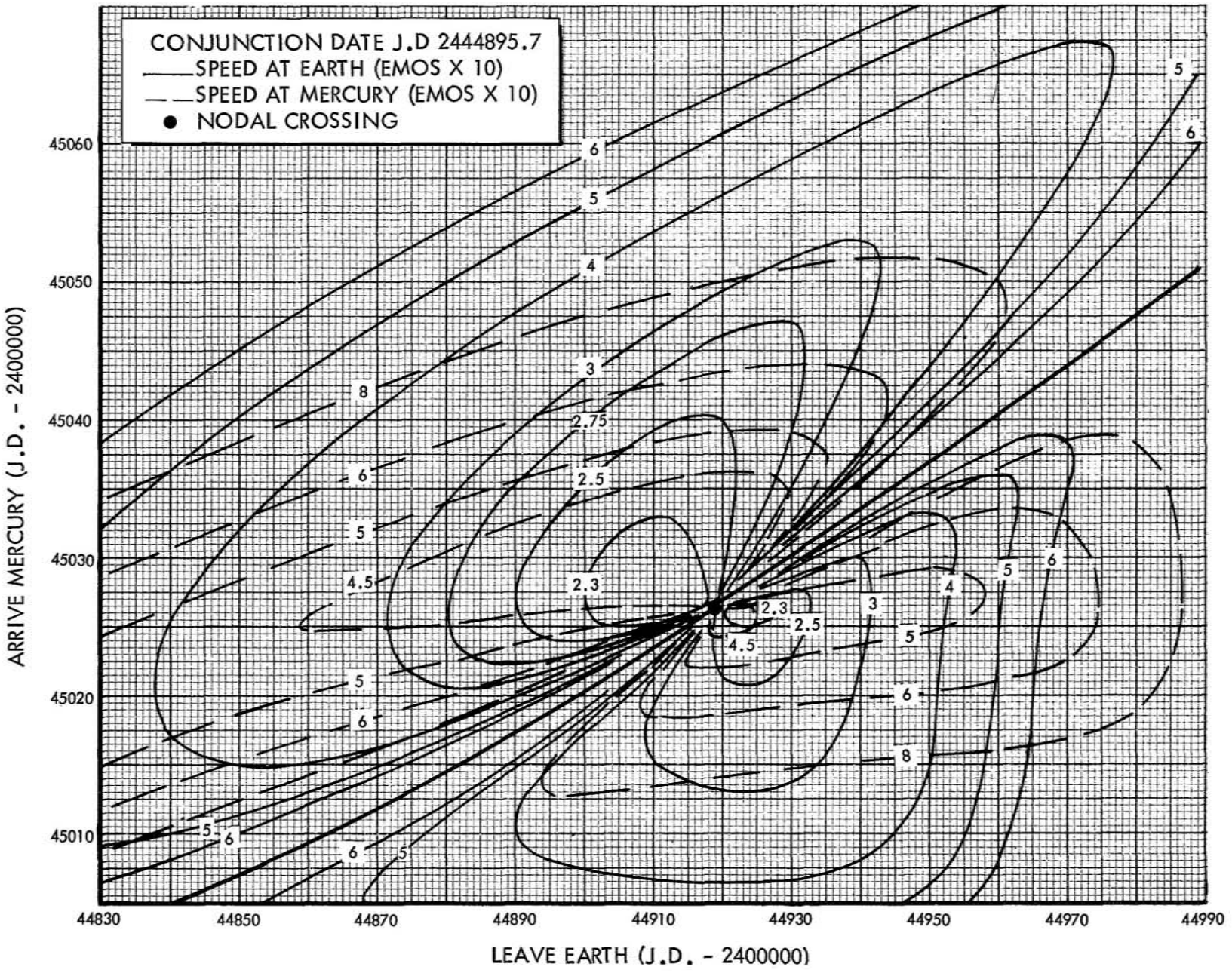


FIGURE 3-10 EARTH-MERCURY TRANSFER (1981)

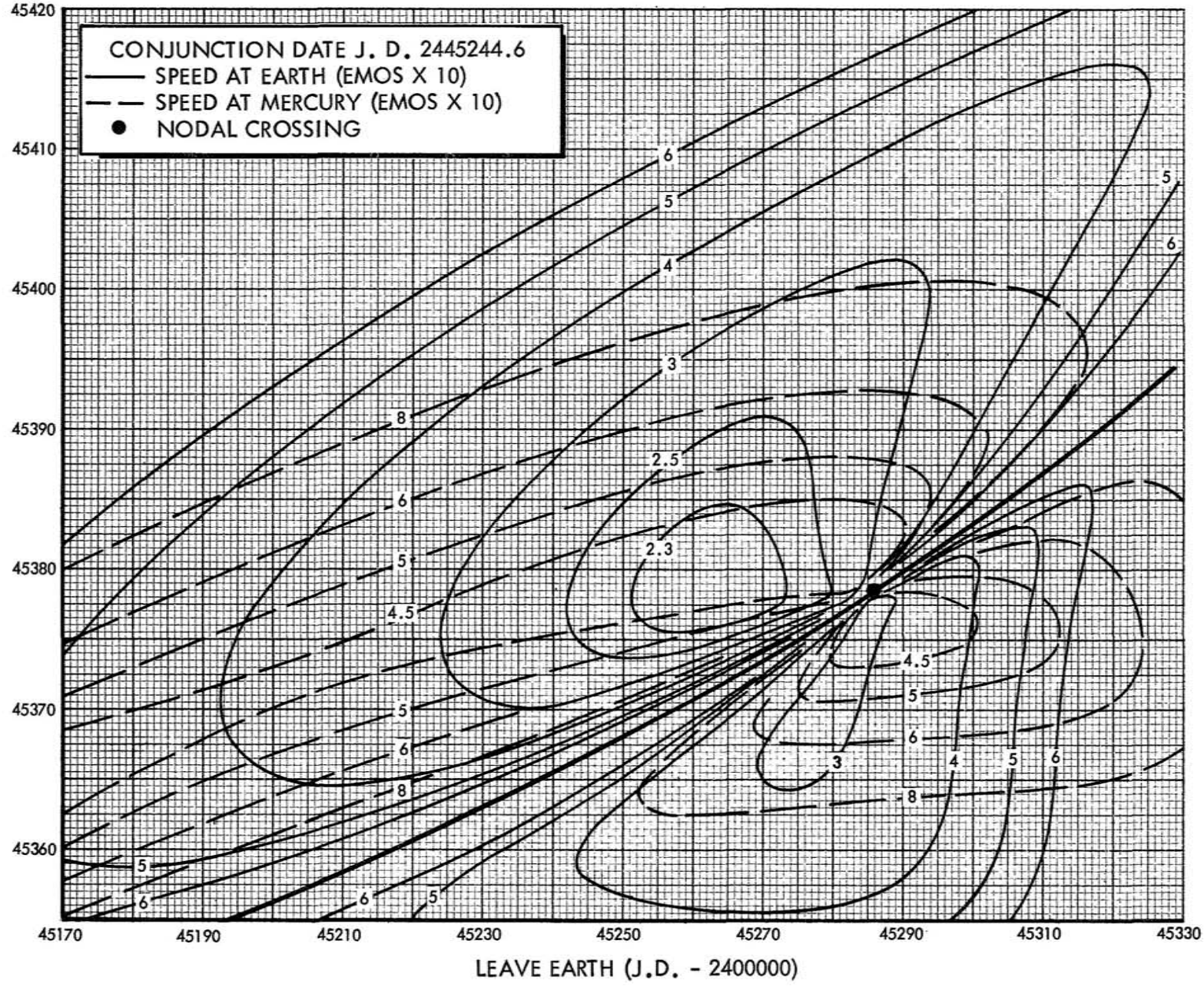


FIGURE 3-11 EARTH-MERCURY TRANSFER (1982)

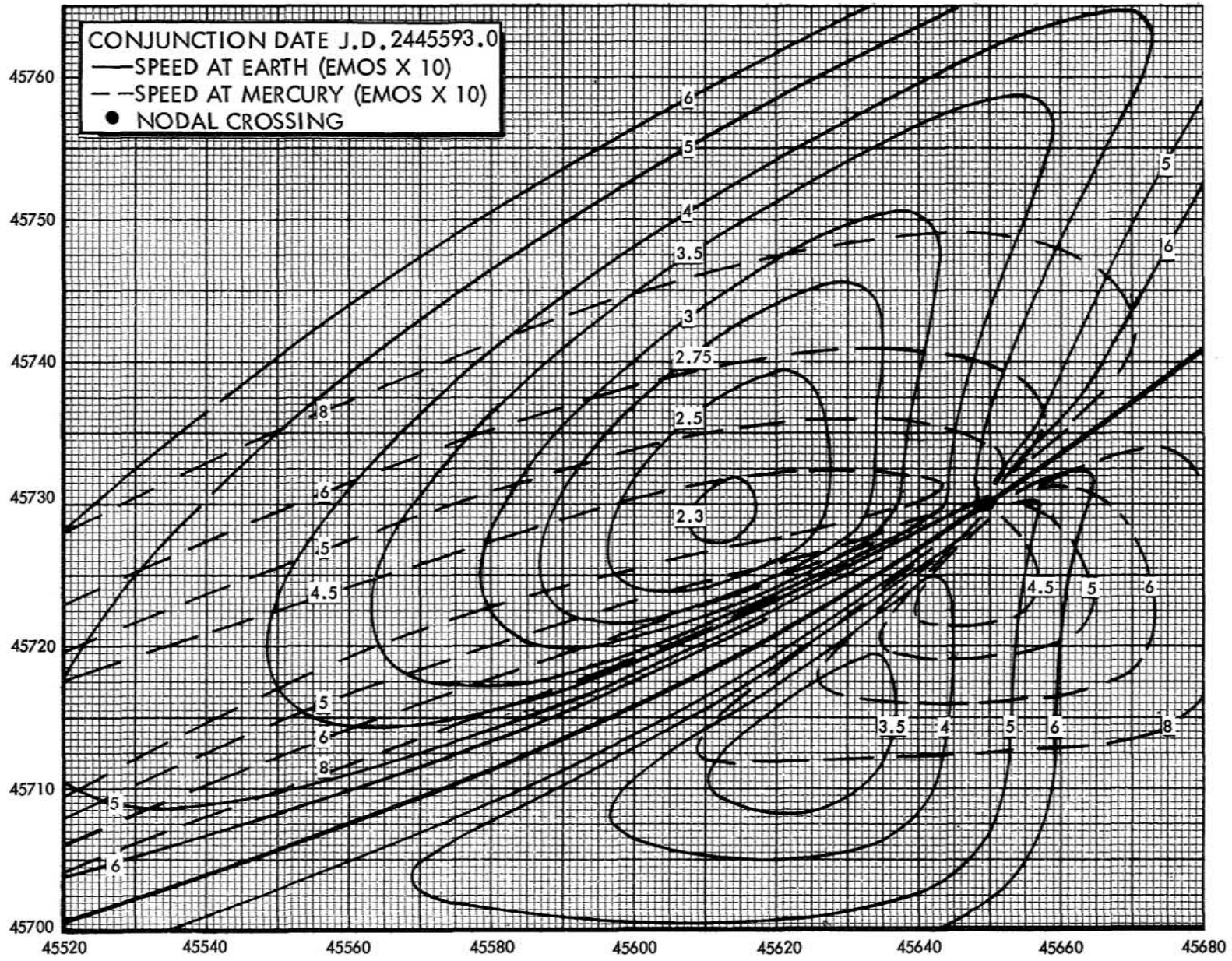


FIGURE 3-12 EARTH-MERCURY TRANSFER (1983)

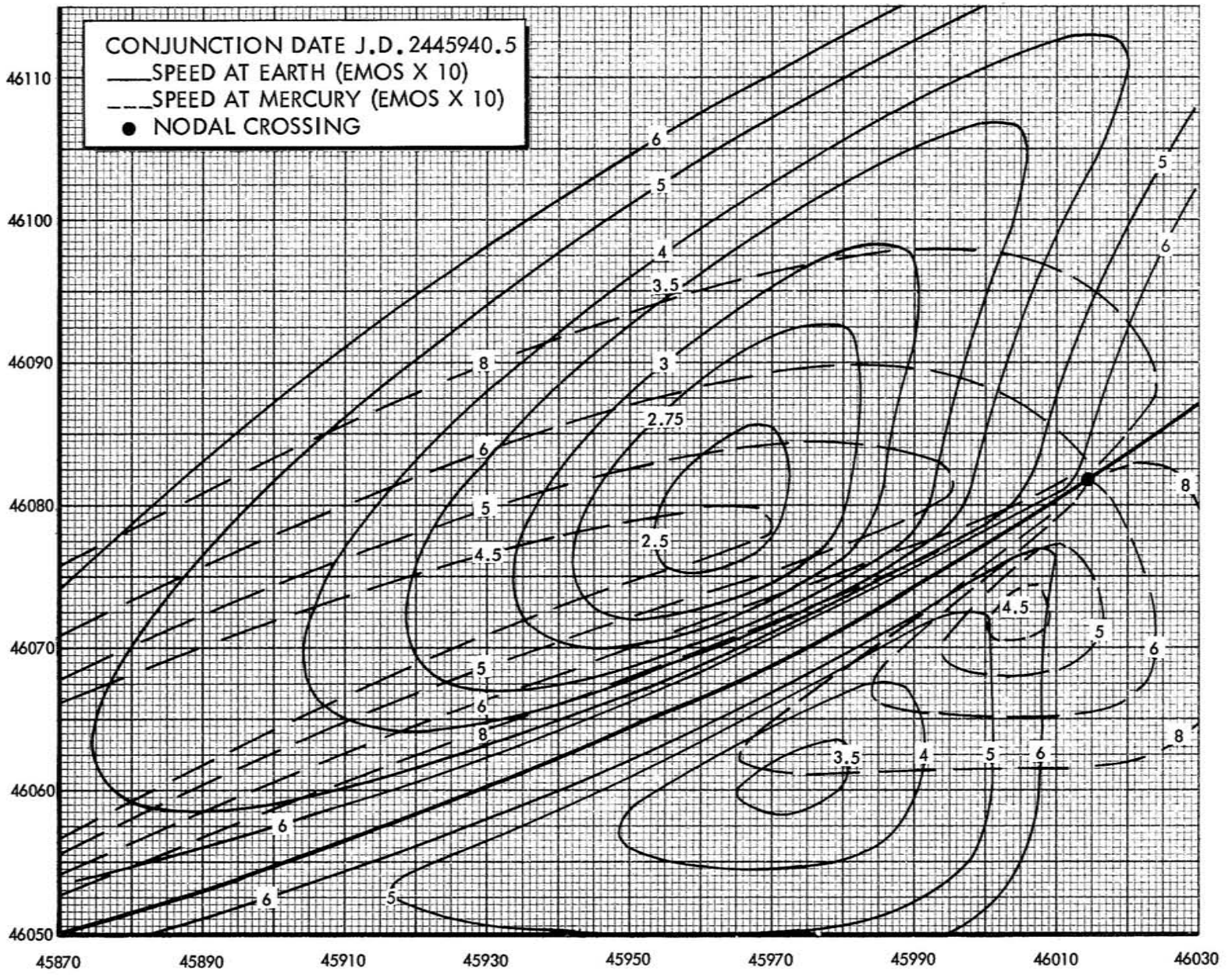


FIGURE 3-13 EARTH-MERCURY TRANSFER (1984)

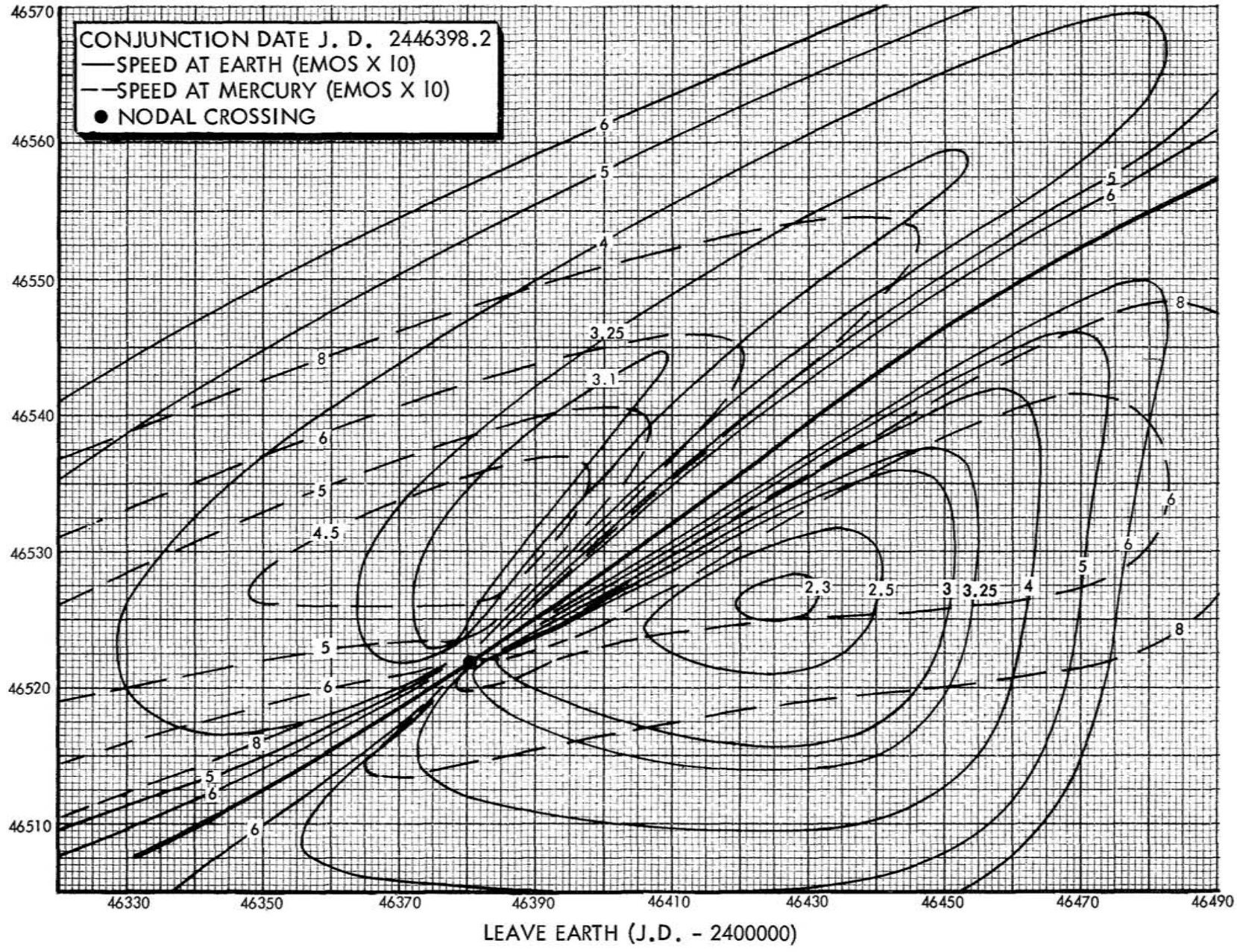


FIGURE 3-14 EARTH-MERCURY TRANSFER (1985)

Section 4

SWINGBY MISSIONS

Venus swingby trajectory data are presented graphically in this section for the 1973-1985 period. These years do not represent a cycle as in the direct mission case, and were selected in order to be consistent with the direct mission data in this handbook. There are a total of seven charts, each accompanied by a short explanatory text. All Earth-Venus launch opportunities in the period 1973-1985 are included with the exception of 1977. It is not included because the small region of unpowered solutions in the 1977 opportunity requires very high Earth departure excess speed (above 0.5 EMOS).* Each chart shows contours of constant Earth departure hyperbolic excess speed, Mercury arrival excess speed, Venus periapsis radius, date of swingby, and Venus encounter ΔV.

Mission Characteristics

The relatively large departure energy requirements associated with direct Earth-Mercury missions can be reduced by employing a swingby of Venus. To attain this reduction, the Earth departure and Venus arrival windows for the swingby missions must coincide with the regions of low energy direct Earth-Venus transfers. These occur at intervals of about 19.2 months (the Earth-Venus synodic period) with an 8-year cycle of synodic periods. The absolute minimum departure energy associated with direct trajectories to Venus range from 0.08 EMOS (6.0 km^2/sec^2) to 0.10 EMOS (8.5 km^2/ sec^2), depending on the particular launch opportunity. If these values are compared with the minimum value for direct trajectories to Mercury, 0.21 EMOS (40 km^2/sec^2), it can be seen that the potential improvement offered by the swingby mode is very significant. Whether or not these advantages can be obtained depends primarily upon two factors: the energy match requirement and turn angle constraint at Venus.

Since the sole effect of the swingby encounter is assumed to be the rotation of the spacecraft's hyperbolic excess velocity, the magnitude of this velocity before and after encounter must be the same for swingby to occur. This condition can usually be attained if no constraints are put upon the selection of the swingby date. However, there is an absolute lower limit on arrival excess speed

*For reference, however, approximate dates defining this region are listed below:

Earth departure	2442900 - 2443150
Venus passage	2443100 - 2443200
Mercury arrival	2443140 - 2443240

at Venus below which transfers to Mercury are no longer possible. The exact value depends upon the launch opportunity; an estimate can be made by determining the excess speed requirements for Hohmann transfers from Venus to Mercury. These values are 0.13 EMOS and 0.27 EMOS for transfers from Venus to Mercury, arriving at, respectively, aphelion and perihelion. (For comparison, the minimum Venus arrival excess speed for an Earth-Venus Hohmann transfer is 0.09 EMOS.) Probably some Earth-Venus trajectories in every launch opportunity will fall below the minimum value of arrival excess speed necessary to transfer from Venus to Mercury. Since such low Venus arrival excess speeds are all generally associated with low departure energy requirements, some desirable missions will be eliminated from consideration. However, this effect depends upon the location of Mercury at arrival, and swingby trajectories arriving at Mercury near its perihelion will be affected the most.

In addition to the excess speed constraint, the turn angle at Venus is constrained since the turn angle in conjunction with the excess speed determines the periapsis radius of the encounter trajectory. For Venus swingbys to Mercury the practical upper limit on the turn angle is about 95°. That is, any turn angle requirement larger than this value cannot be made without impacting the planet (or resorting to either a powered or atmospheric braking maneuver). As the encounter excess speed is increased, the maximum possible turn angle rapidly decreases as illustrated in Figure 2-2 in Section 2. The relatively small capability of Venus to turn (perturb) an intersecting trajectory severely limits the number of Earth-Venus transfers which can be altered to encounter Mercury. Therefore, many of the trajectories which satisfy the energy match requirement still do not provide practicable missions to Mercury because the encounter trajectory at Venus would have to pass beneath the surface to achieve the required turn. Since some of these missions are otherwise desirable, a powered maneuver may be employed to increase the periapsis radius. The effects of a powered maneuver are included in the contour charts in this section and in the computer data in Section 6. Data for the powered maneuvers are shown only for those encounter trajectories which would normally have periapsis radii less than 1.05 Venus radii. It was assumed that periapsis equal to or greater than 1.05 radii would be unaffected by the atmosphere of Venus and therefore require no propulsive ΔV at encounter. The method of determining the encounter ΔV, although not optimum, is straightforward and yields results which are generally indicative of the optimized propulsive requirements. It assumes that the original,

impacting transfer is adjusted to pass the planet at 1.05 radii while keeping the encounter excess speed the same. Since the magnitude of the excess velocity is not changed, the increase in periapsis has the effect of decreasing the turn angle. When the spacecraft has reached infinity (relative to the planet) on the outbound leg, its asymptote direction will be in error by an amount equal to the difference between the turn angle of the original, unperturbed encounter and the turn angle of the actual encounter passing at 1.05 radii. The encounter ΔV then consists of the velocity change required to rotate the asymptote through this angular difference:

$$\Delta V = 2\ V_{\infty} \sin\ (\Delta K/2)$$

where V_{∞} is the excess speed and ΔK is the required angular difference. When this ΔV is greater than 1000 m/sec, the data is neither printed in the tabular data nor shown in the contour charts.

The contour charts in this section illustrate that the powered swingby mode is not particularly effective in extending the Mercury arrival period. On the other hand, although the nonlinear relation between encounter ΔV and departure date results in a rapid rise in ΔV requirements, the Earth departure period can be increased moderately. Also, in some launch opportunities (1975, 1980, and 1983), a favorable tradeoff may be possible between Earth departure ΔV and encounter ΔV. This is a more significant advantage of the powered mode than simply increasing the departure period.

Earth-Venus-Mercury Mission Contour Charts

The contour charts show contours of constant Earth departure hyperbolic excess speed, Mercury arrival excess speed, Venus periapsis radius, date of swingby, and Venus encounter ΔV. A short explanatory text accompanies each chart. It should be noted that because the swingby regions are all different, a uniform scale was not used.

In preparing these charts the following general constraints were applied:

1. Only those regions which contained unpowered encounters were included. In two cases, 1978 and 1980, an additional (powered only) region was included with the basic unpowered region.
2. Only part of some unpowered regions were shown due to long trip times and departure speeds above 0.6 EMOS.
3. Contours were terminated beyond the 1000 m/sec encounter ΔV contour.

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1973 SWINGBY

The unpowered swingby opportunities in 1973 are composed of only Type I Earth-Venus, Type I Venus-Mercury heliocentric transfer trajectories. The approach to Venus is from the darkside with periapsis over the lightside, generally within 20 degrees of the terminator.

The unpowered missions are approximately centered on the region of lowest Earth departure excess speed. There is a launch period of approximately 90 days for which the departure excess speed is 0.2 EMOS or less. Considering the powered swingby mode it is apparent that it is not an effective method of extending either the Earth departure period or the Mercury arrival period.

At Earth departure dates earlier than about 41935 and Mercury arrival dates later than 42145, a Venus encounter excess speed match is not possible and, as a result, neither are swingbys under the constraints applied in this handbook. The effect of this is seen in the abrupt termination of some of the contours in the region of the dates indicated above.

There is another region of Type I - Type I swingbys available but not shown on the chart. The maximum departure period of this region is about 9 days and the maximum arrival period is about 4 days. These trajectories, although of the same type, are of a different class than those shown on the contour chart. The small region is approximately centered on Earth date 41932, Mercury date 42146 and is slightly outside the energy match boundary of the primary region. Data on this alternate region is included in the tabular data in Section 6.

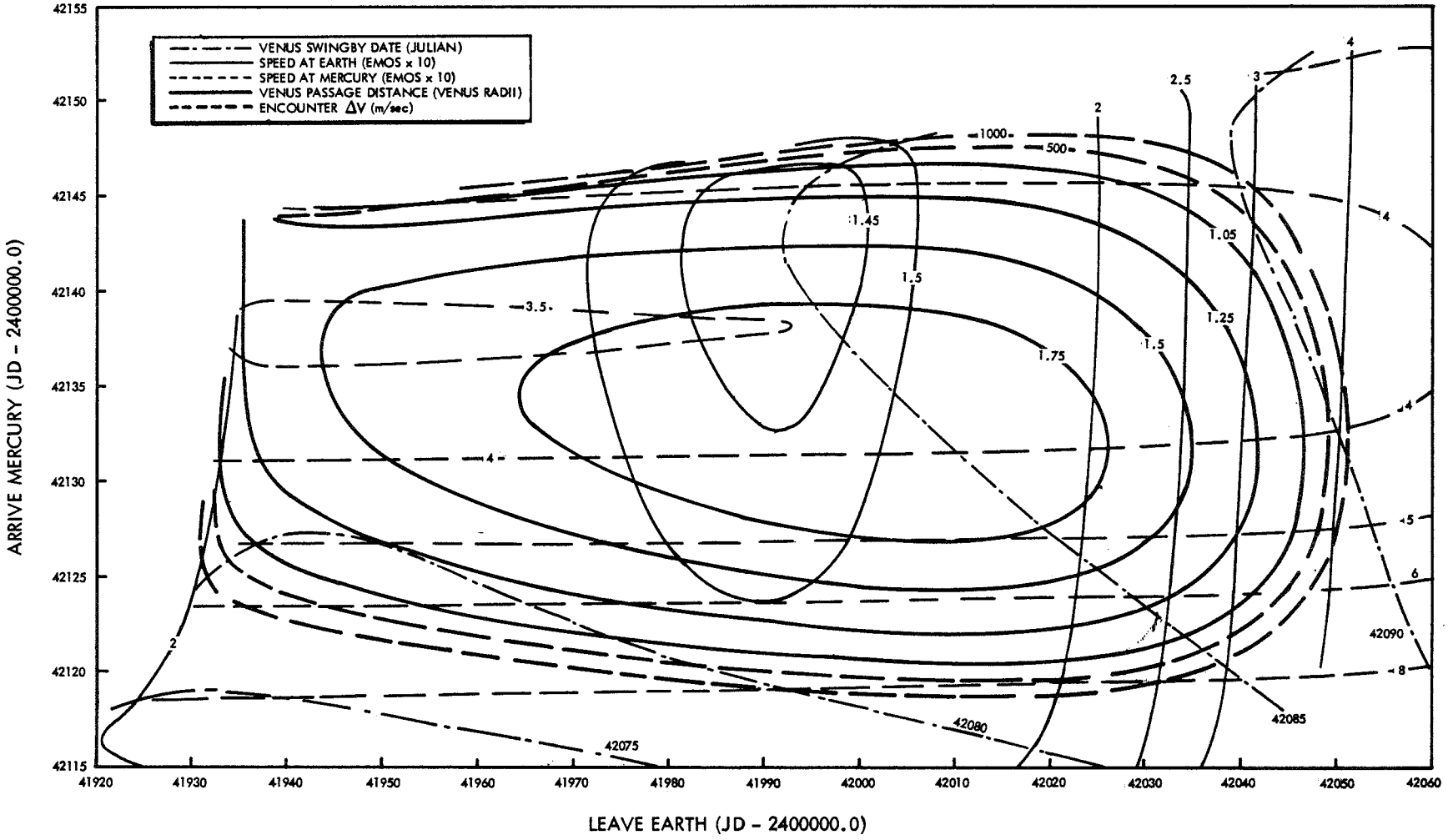


FIGURE 4-1 EARTH-VENUS-MERCURY TRANSFERS (1973)

1975 SWINGBY

The unpowered swingby opportunities in 1975 are composed of only Type I Earth-Venus, Type II Venus-Mercury heliocentric transfer trajectories. The approach to Venus is from the darkside with periapsis over the lightside, generally within 20 degrees of the terminator.

The most significant feature of missions in this launch opportunity is the limited launch and arrival periods which are available. The Earth departure period is about 45 days in length and the Mercury arrival period is about 8 days (maximum) for unpowered swingbys. In addition, the encounter period at Venus is only about 5 days. The departure excess speed requirements for the unpowered swingbys are less than those of direct missions in the same time period.

In this launch opportunity the powered swingby mode is very efficacious. As can be seen, both the departure period and the arrival period can be increased; the amount of increase depending, of course, on the upper limit set on the encounter ΔV. The powered maneuver also makes available mission opportunities with departure energy requirements less than those associated with unpowered swingbys.

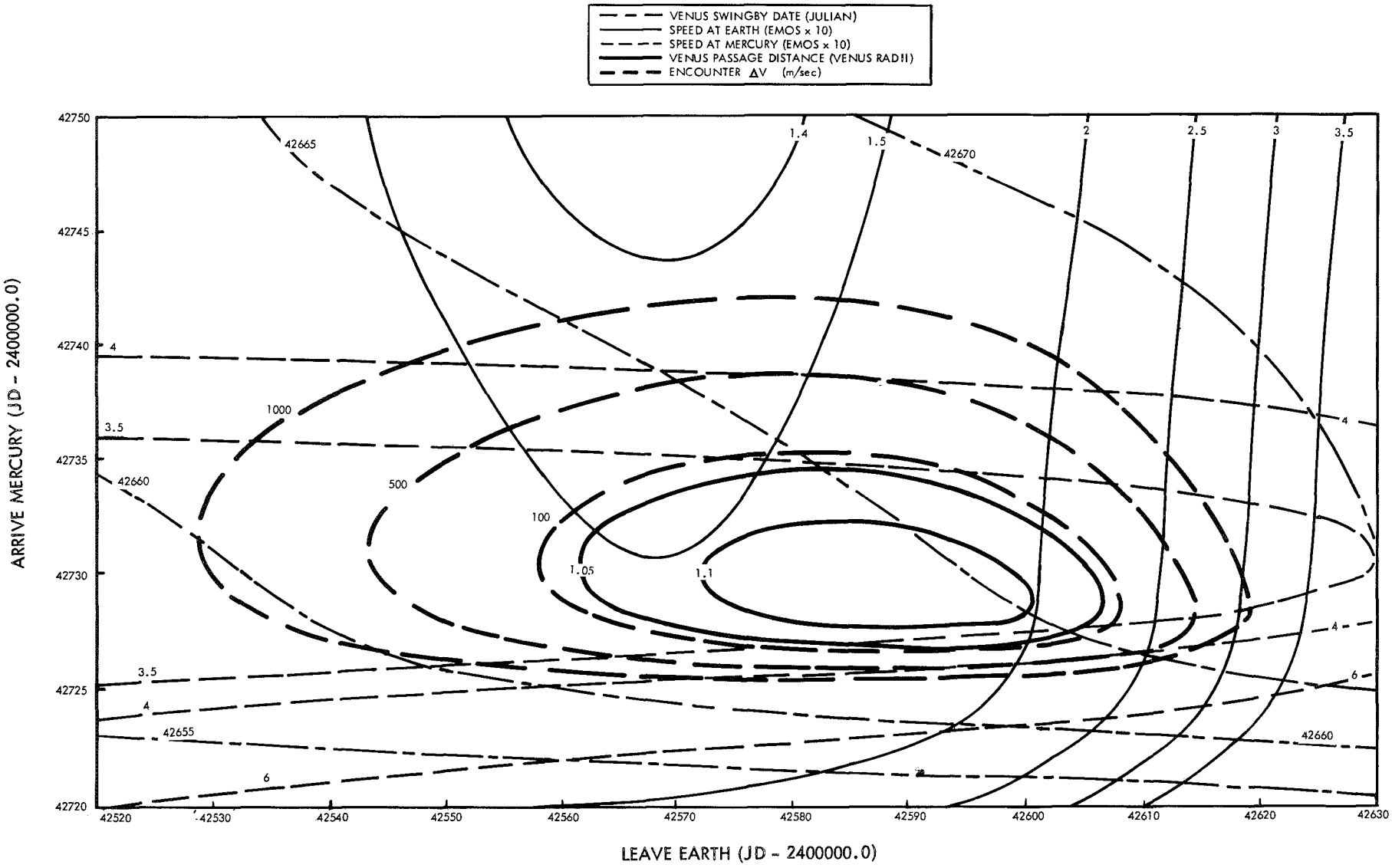


FIGURE 4-2 EARTH-VENUS-MERCURY TRANSFERS (1975)

1978 SWINGBY

In 1978 unpowered swingby opportunities are composed of Type I Earth-Venus, Type I Venus-Mercury heliocentric trajectories. These missions occur in the lower of the two regions shown on the contour chart. The upper region which begins at arrival dates around 43877, exhibits no unpowered swingbys (that is, all encounter periapsis radii are less than 1.05 radii). However, the region was included since the powered encounter requirements are low and the departure excess speeds are less than 0.25 EMOS. This region is composed of Type I Earth-Venus/Type II Venus-Mercury heliocentric legs. Both mission types on this contour chart approach Venus from the darkside and have lightside periapses.

Considering the Type I - Type I missions, the chart illustrates that the region of unpowered swingbys is very extensive. The range of periapsis radii is from 1.05 to slightly more than 3.0 radii. The maximum Earth launch period bounded by the 0.2 EMOS contour is about 80 days. The swingby encounter period is rather short considering the length of the departure and arrival periods; the encounters span about 15 days at Venus. The powered encounter mode for these missions is not effective in significantly extending either the departure period or the arrival period. The termination of data for these missions at Mercury arrival dates greater than 43875 is caused by the lack of an energy match at Venus encounter. A similar effect occurs for Earth departure dates earlier than about 43630.

The Type I - Type II missions are characterized by a rather short departure period (within the bounds of practical encounter ΔV considerations) and departure energy requirements that offer no advantage over those of the Type I - Type I missions. The contours terminate at departure dates earlier than about 43630 due to the lack of an encounter energy match.

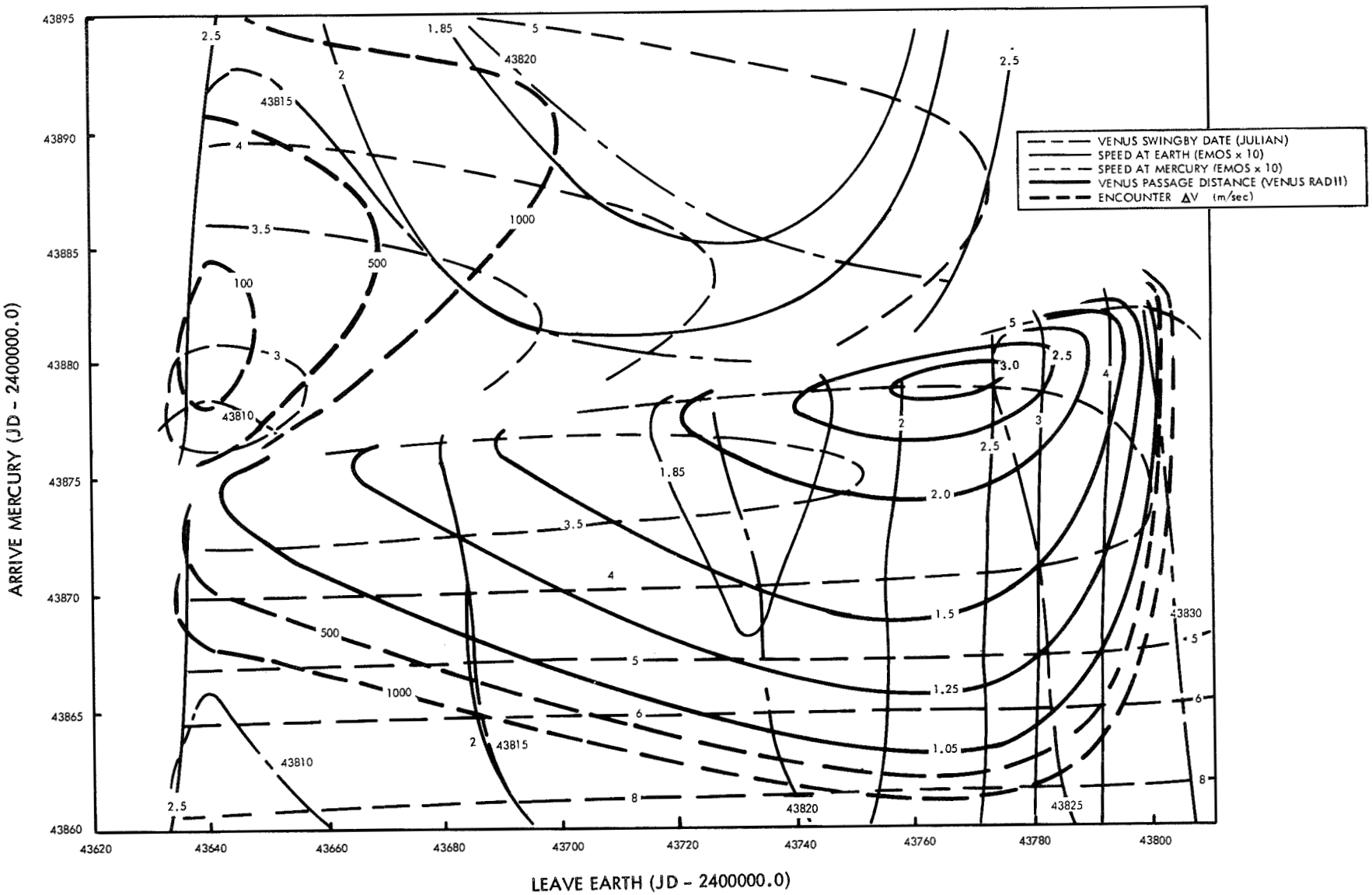


FIGURE 4-3 EARTH-VENUS-MERCURY TRANSFERS (1978)

1980 SWINGBY

The 1980 opportunity is composed of two distinct regions in which unpowered swingbys are possible. The most extensive of these, occurring between departure dates 44110 and 44270, is composed of Type II Earth-Venus, Type II Venus-Mercury transfer trajectories. The second, much smaller region of unpowered swingbys, occurs between departure dates 44350 and 44390. These missions have Type I Earth-Venus, Type II Venus-Mercury transfers. In addition to these unpowered regions, a third region containing only powered swingbys is included on the chart. This region lies between 44230 and 44350 and is composed of Type II - Type I heliocentric transfers. Approach to Venus is from the light-side for all three mission types, with the periapsis point generally occurring in the region of the terminator.

The Type II - Type II region, although extensive, is characterized by relatively high Earth departure excess speeds. The departure requirements are of the same order of magnitude as those for direct missions in the same launch year.

The Type I - Type II region exhibits a very small region of unpowered swingbys. The departure period at Earth is less than 10 days. In addition, the departure excess speeds, like those of the Type II - Type II region, are essentially the same as those of the direct missions available in this time period.

The powered encounter mode is moderately effective in extending the departure and arrival periods in the two regions discussed above. However, no significant reduction in departure energy requirements can be obtained.

Perhaps the most interesting region is the powered-only Type II - Type I region. Although encounter ΔV requirements are generally large, the Earth departure excess speed requirements are less than 0.1 EMOS over a portion of the region. The Earth departure period for which the excess speed is less than 0.2 EMOS is about 90 days.

The encounter energy match requirement causes the contours associated with the Type II - Type II region to terminate between 44190 and 44230 for early Mercury arrival dates. A similar effect terminates the Type I - Type II contours around the arrival dates 44585 - 44590. The Type II - Type I region also terminates near departure date 44350 due to the energy match requirement. However, there is another class of missions of this type which exist for departure dates beginning about 44350 and extending toward later departures. They are not shown since encounter ΔV requirements are excessive.

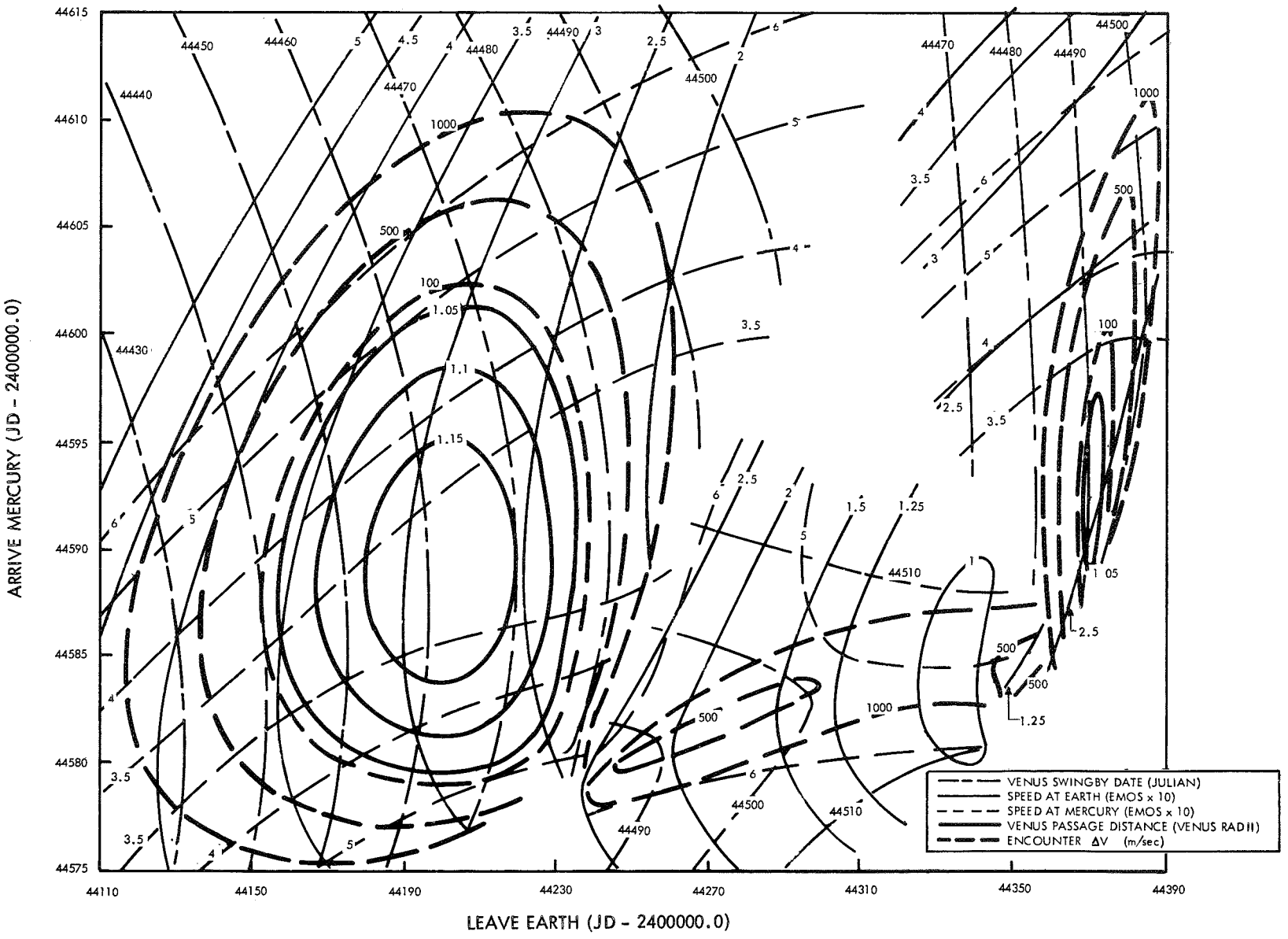


FIGURE 4-4 EARTH-VENUS-MERCURY TRANSFERS (1980)

1982 SWINGBY

There are two regions of unpowered swingbys in the 1982 opportunity. The largest of these, for which unpowered missions exist across the entire departure period on the chart, is composed of Type II Earth-Venus, Type II Venus-Mercury heliocentric transfer legs. The second, a considerably smaller region, is composed of Type II Earth-Venus, Type I Venus-Mercury transfer trajectories. Both mission types are characterized by lightside approaches to Venus and darkside periapses. The periapsis point is generally within 20 degrees of the terminator.

The Type II - Type II region is the most extensive unpowered swingby region available in the 1973-1985 time period. The region extends beyond the earliest departure date shown on the contour chart for a period of about 80 days. These early departures are not included on the chart because the Earth departure excess speeds are in excess of 0.5 EMOS. Within the region shown on the contour chart, the departure period between about 44950 and 45080 exhibits departure excess speeds less than those required for direct missions in this launch year. The range of periapsis radii for these particular missions extends up to more than 2.0 radii.

The Type II - Type I region is much smaller than the Type II - Type II region. There is, however, an Earth departure period of about 60 days for which departure excess speeds are less than those of direct missions. This period lies between about 44990 and 45050. The Mercury arrival period associated with this launch period is about 10 days. It should be noted that the Mercury arrival excess speeds for Type II - Type I missions are high: in excess of 0.6 EMOS for all unpowered and powered trajectories in the region.

The powered Venus encounters for both the Type II - Type II and Type II - Type I regions provide a moderate increase in departure period. However, the powered mode does not make possible any decrease in departure energy requirements in either of these regions.

There is an energy match boundary which affects both regions. It essentially lies along the diagonal strip which separates the two regions. This energy match boundary produces the termination of the contours in the area noted. There is also an energy match boundary in the region of departure date 45050, arrival date 45285 in the Type II - Type I region.

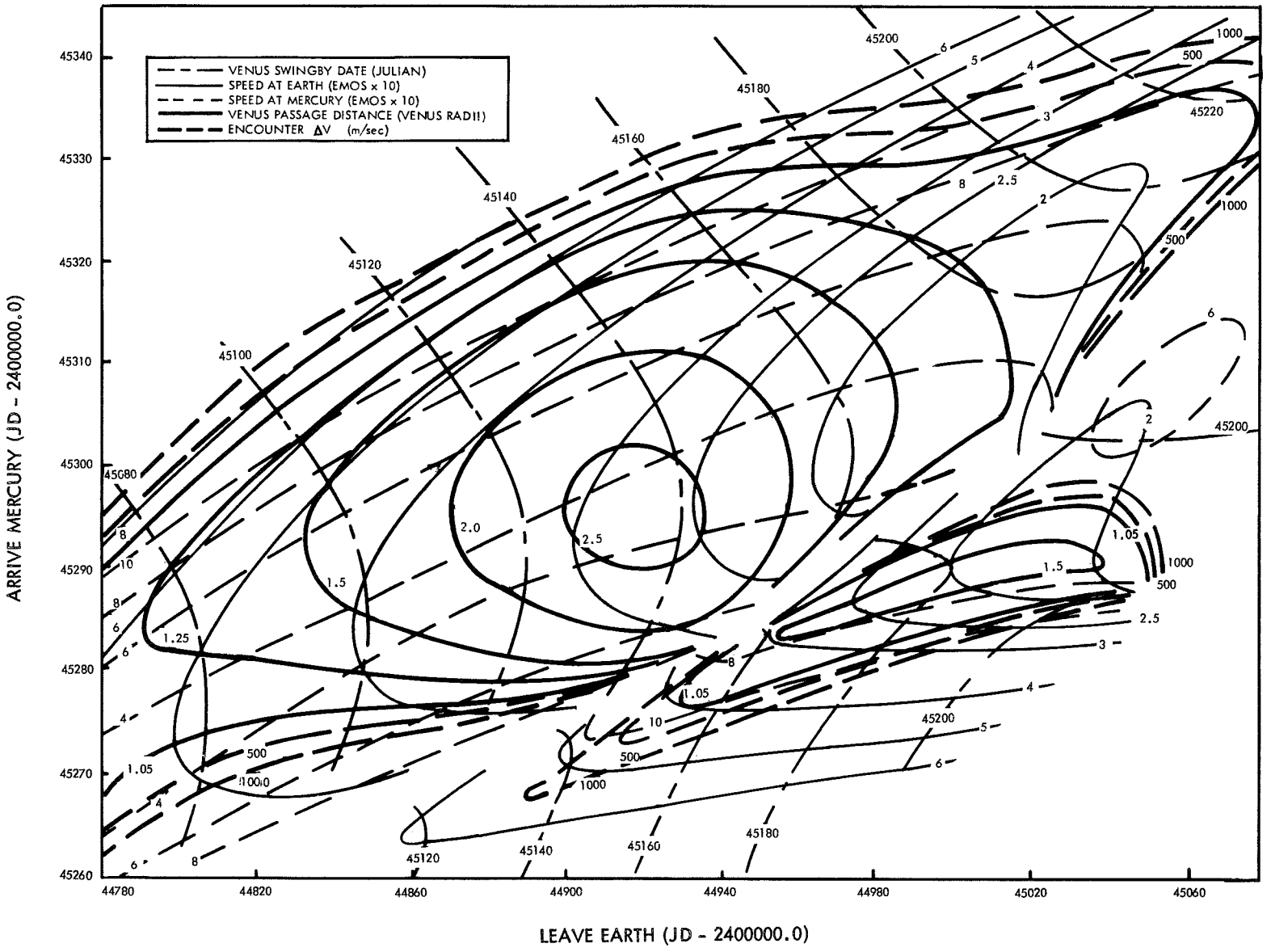


FIGURE 4-5 EARTH-VENUS-MERCURY TRANSFERS (1982)

1983 SWINGBY

The unpowered swingby missions in this launch opportunity are composed of Type I Earth-Venus, Type I Venus-Mercury trajectories (the lower region) and Type I Earth-Venus, Type II Venus-Mercury trajectories (the upper region). Both mission types are characterized by a darkside approach to Venus and a lightside periapsis. The periapsis is generally within 20 degrees of the terminator.

The unpowered swingby regions of both mission types exhibit short departure and arrival periods. From this standpoint the Type I - Type II region is the most favorable, having an Earth departure period of about 55 days and an arrival period of about 10 days. In addition, the Type I - Type II region has periapsis radii greater than 1.3 radii, compared to slightly more than 1.1 for the Type I - Type I region.

The Earth departure excess speeds associated with the unpowered swingbys of both regions are at best only slightly better than the requirements for direct missions in this launch opportunity. A powered maneuver can be used to decrease the departure energy requirements in both regions and, in addition, considerably increase the Earth departure period. As was the case in 1980, however, the improvement in departure excess speed obtained with the powered swingby is generally insufficient to offset the increase in encounter ΔV which occurs.

Although it has no direct effect on the contour chart, it should be noted that an encounter energy match boundary occurs for the Type I - Type I region at arrival dates later than about 45615.

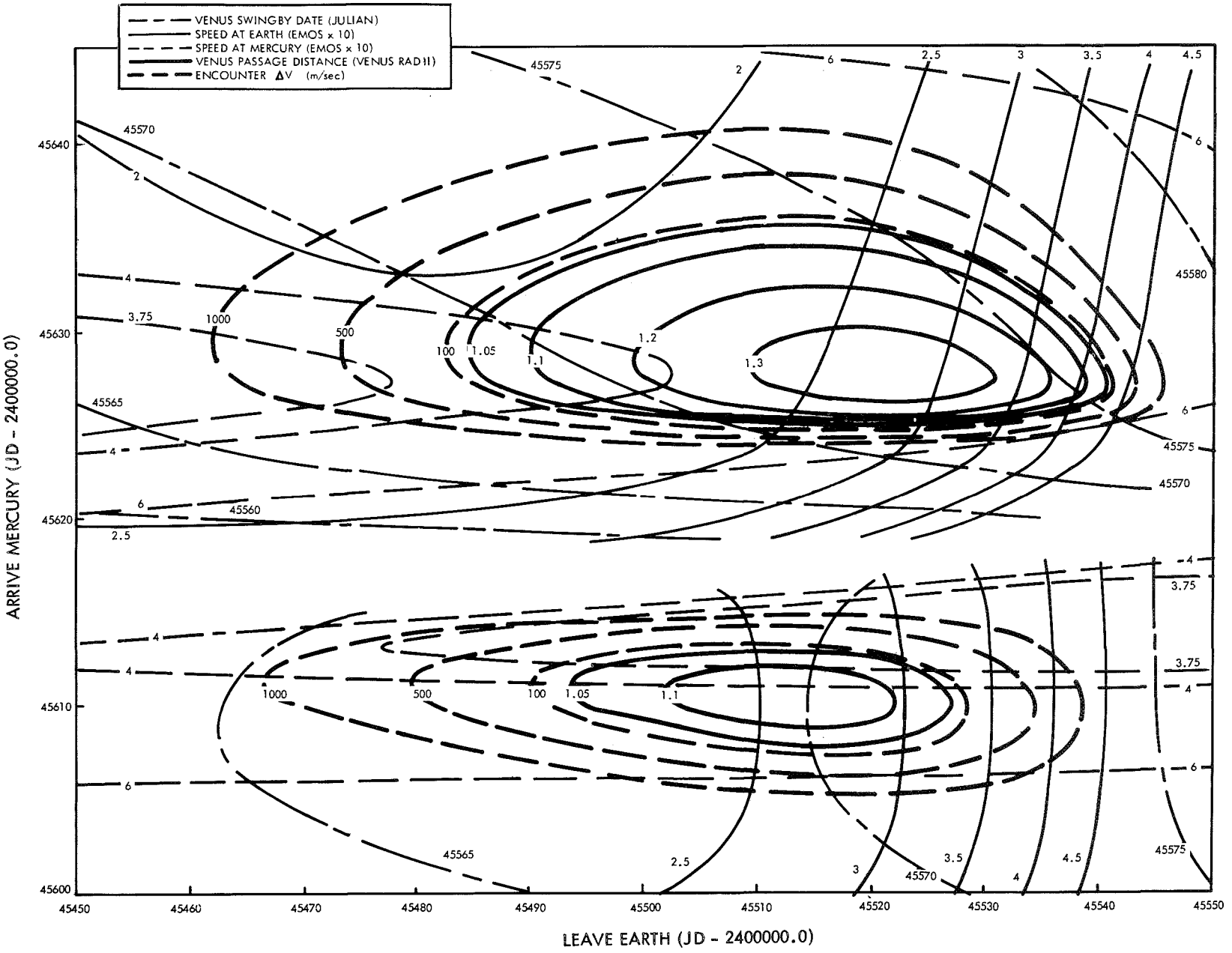


FIGURE 4-6 EARTH-VENUS-MERCURY TRANSFERS (1983)

1985 SWINGBY

The two unpowered swingby regions in the 1985 opportunity consist of Type II Earth-Venus, Type I Venus-Mercury missions (the lower region) and Type II Earth-Venus, Type II Venus-Mercury missions (the upper region). Both regions are characterized by a lightside approach to Venus and a darkside periapsis. The periapsis is generally within 20 degrees of the terminator.

The Type II - Type I region extends beyond the earliest departure date on the contour chart by about 70 days. This region is not shown since Earth departure excess speeds are relatively high and provide no advantage over direct mission requirements. A launch period of about 30 days exists for which departure excess speed requirements for unpowered swingbys are less than those of direct missions. This period extends from around 46170 to 46200. For this mission type the powered swingby mode makes possible an extension of the departure period and a decrease in departure energy requirements.

The unpowered Type II - Type II region is characterized by a relatively short departure and arrival period. The departure excess speeds are relatively low with a period of about 50 days for which departure energy requirements are less than those for direct trips. This region is one of a pair of Type II - Type II regions, the larger of which is not shown. The larger region lies approximately between the departure dates 45900 and 46100 and is not shown because the departure excess speeds are significantly larger and the mission durations are considerably longer than those in the region shown. These two regions are encompassed by the encounter ΔV contours. This results in a considerable extension of the departure period of the region shown in the contour chart.

The data for the Type II - Type II region is terminated by an encounter energy match boundary between departure dates 46190 and 46230 near arrival date 46470.

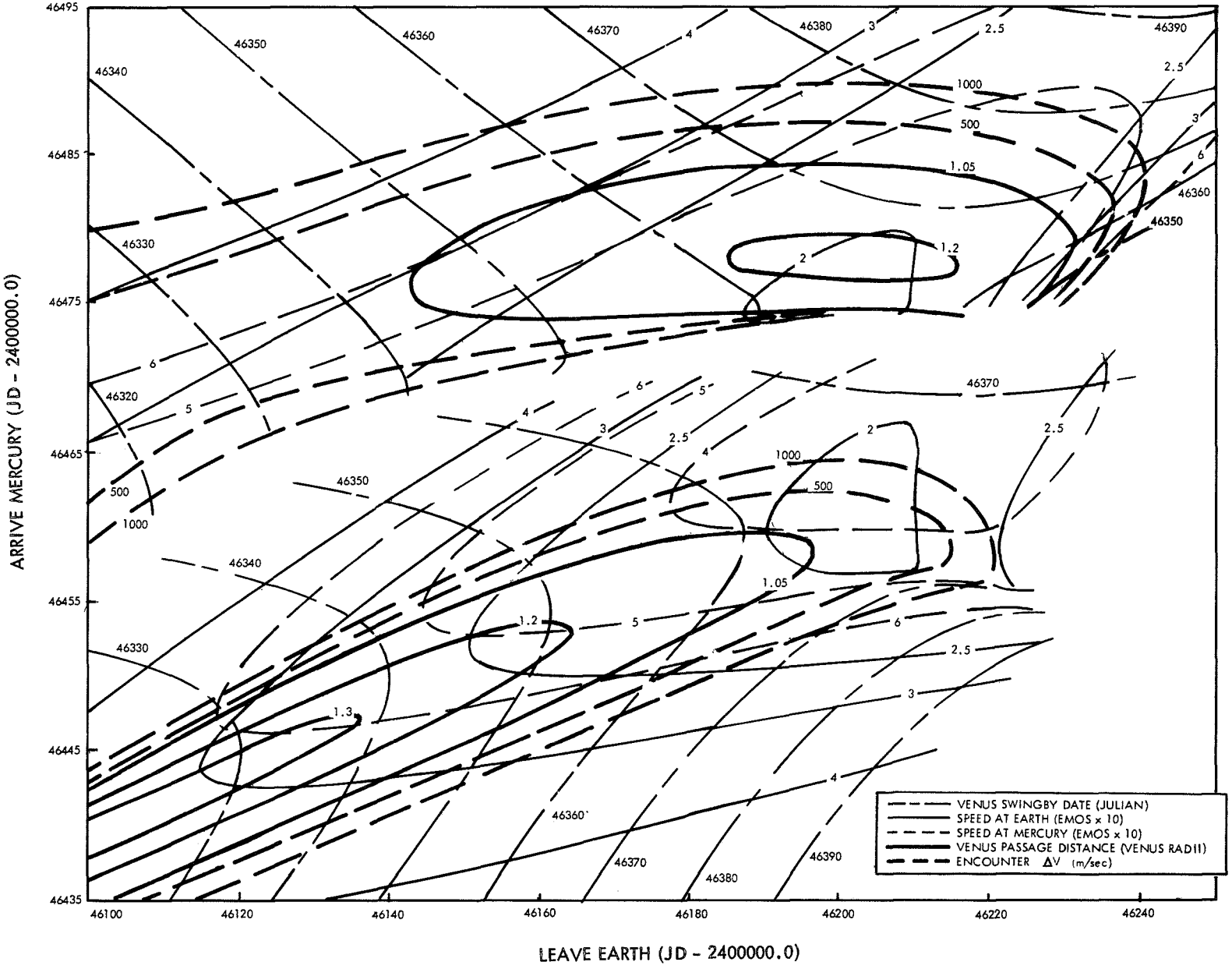


FIGURE 4-7 EARTH-VENUS-MERCURY TRANSFERS (1985)

Section 5

TABULAR TRAJECTORY DATA FOR DIRECT TRAJECTORIES TO MERCURY

Introduction

The trajectory data are presented chronologically and are organized by holding the arrival date constant while varying the Earth departure date in increments of 10 days. Upon completion of the specified range of Earth departure dates, the arrival date is incremented by 2 days and the range of departure dates is repeated. The range of departure and arrival dates are given in Table 5-1 for each launch opportunity. The dates are selected to include the most desirable region in terms of Earth departure excess speed and flight time. The earliest Mercury arrival date and latest Earth departure date are chosen to include the 0.4 EMOS Earth departure excess speed contour. To eliminate the long flight time trajectories the earliest Earth departure date and latest Mercury arrival date are chosen to include only the 0.35 EMOS and 0.3 EMOS contours respectively.

TABLE 5-1

RANGES OF DEPARTURE AND ARRIVAL DATES (DIRECT MISSION)

	Earth Departure Date	Mercury Arrival Date
1973	41960 - 42060	42106 - 42154
1974	42310 - 42410	42456 - 42504
1975	42660 - 42760	42804 - 42854
1976	43010 - 43110	43154 - 43200
1977	43360 - 43460	43500 - 43544
1978	43720 - 43820	43850 - 43894
1979	44160 - 44260	44308 - 44350
1980	44510 - 44610	44656 - 44700
1981	44860 - 44960	45004 - 45052
1982	45210 - 45310	45354 - 45402
1983	45560 - 45660	45704 - 45750
1984	45920 - 46010	46054 - 46100
1985	46360 - 46470	46510 - 46556

There are two lines of print for each trajectory (departure date/arrival date pair). In the first line the two leftmost columns contain the dates of departure and arrival. The next 18 columns of the first line can be divided

into three groups: six columns of data related to departure, six columns pertinent to the heliocentric phase of the mission, and six columns related to arrival at the target planet. The second line of print contains, respectively, the ΔV requirements for departure and arrival, the total ΔV requirement, the heliocentric transfer trajectory type, and four parameters defining conditions at arrival. The value computed for the arrival ΔV is for entry into a 1000-km circular orbit. The altitude selected for this orbit, while necessarily somewhat arbitrary, is assumed to be representative of nondecaying orbits.* Note again that even though we include arrival ΔV in the data these opportunities are not generally minimum energy for orbiter missions.

All data in this handbook are for posigrade trajectories having transfer angles of less than 360 degrees. In order to reduce the volume of the handbook those trajectories for which the Earth departure excess speed exceeds 0.60 EMOS are not listed even though such trajectories may occur in the region of dates given in Table 5-1.

Below are listed the symbols used in the format and the definition of each.

Symbol	Definition
DEPART	Julian date (minus 2400000) at Earth departure
ARRIVE	Julian date (minus 2400000) at Mercury arrival
SPEED	Hyperbolic excess speed at Earth departure (EMOS)
R A	Right ascension of hyperbolic excess velocity at Earth departure, measured along the equator eastward from the vernal equinox (degrees)
DECL	Declination of the hyperbolic excess velocity vector at Earth departure, measured positively northward and negatively southward from the equator (degrees)
I 1	Inclination of the transfer orbit to the ecliptic. The angle is positive if the heliocentric velocity vector of the transfer trajectory is directed above the ecliptic; the angle is negative if the velocity vector is directed below the ecliptic (degrees)
V 1	Heliocentric speed of departure (EMOS)
PSI 1	Heliocentric angle of departure, measured counterclockwise from the outward-directed heliocentric radius vector to the departure velocity vector in the transfer plane (degrees)

* Reference 7, page 4.

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ECCEN	Eccentricity of the transfer orbit
SMA	Semimajor axis of the transfer orbit (AU)
THET1	True anomaly in the transfer orbit at departure, reduced to $0 \leq \theta \leq 360$ (degrees)
THET2	True anomaly in the transfer orbit at arrival, THET2 minus THET1 equals the heliocentric transfer angle (degrees)
PERIH	Perihelion distance of the transfer orbit. If the vehicle does not transit perihelion, the value is followed by a "D" (AU)
APHEL	Aphelion distance of the transfer orbit. If the vehicle does not transit aphelion, the value is followed by an "A"; for values of ECCEN $\geq$1.0, the characters "NA" (for Not Applicable) are printed (AU)
I 2	Inclination of the transfer orbit to Mercury's orbit plane. The angle is positive if the heliocentric velocity vector of the transfer trajectory is directed above Mercury's orbit plane at arrival; the angle is negative if the velocity vector is directed below Mercury's orbit plane (degrees)
V 2	Heliocentric speed of arrival (EMOS)
PSI 2	Heliocentric angle of arrival, measured clockwise from the inward-directed heliocentric radius vector to the arrival velocity vector in the transfer plane (degrees)
R A	Right ascension of the hyperbolic excess velocity vector at Mercury arrival, measured along the local planetary equator eastward from the "vernal equinox." Note that this is the right ascension of the position at which the hyperbolic excess vector (asymptote) would emerge from the planet's celestial sphere (degrees)
DECL	Declination of the hyperbolic excess velocity vector at Mercury arrival; this is the declination at which the excess velocity vector would emerge from the planet's celestial sphere (degrees)
SPEED	Hyperbolic excess speed at Mercury arrival (EMOS)
DV1	Impulsive velocity (ΔV) necessary to attain the required excess speed at Earth departure. Departure is from a circular orbit of 185-km altitude (km/sec)
DV2	Impulsive velocity (ΔV) necessary to enter a circular orbit at Mercury (km/sec). The orbit altitude is 1000 km
DVT	Total ΔV; DV1 + DV2 (km/sec)
LEG	Heliocentric transfer angle. ONE if the transfer angle is less than 180°. TWO if the transfer angle is greater than 180°
CDIST	Communication distance. Distance between Earth and Mercury at date of arrival (AU)

RAS	Right ascension of the subsolar point at Mercury, measured along the local planetary equator eastward from the "vernal equinox" (degrees)
DECLS	Declination of the subsolar point at Mercury, measured positively northward and negatively southward from the planet's equator (degrees)
LAMDA	Approach illumination angle. It is the angle between Mercury's heliocentric radius vector and the incoming hyperbolic excess velocity vector. A lightside approach directed through the subsolar point is defined as 0^{o} (degrees)

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	T 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2442106.0											
41960.0	42106.0	0.505	322.6	8.4	15.14	0.784	69.0	0.549	0.722	154.6	310.6	0.326D	1.118	-10.41	1.999	72.9	256.1	-19.9	1.015
		10.84	27.94	38.78	ONE	0.630	270.7	0.0	155.5										
41970.0	42106.0	0.473	332.3	6.2	11.05	0.764	66.2	0.556	0.703	157.2	303.7	0.313D	1.094	-5.76	1.990	70.5	257.9	-10.4	1.044
		10.08	28.77	38.86	ONE	0.630	270.7	0.0	163.5										
41980.0	42106.0	0.454	339.2	5.8	8.88	0.742	67.7	0.565	0.685	160.1	296.8	0.298D	1.071	-3.00	1.980	68.1	260.4	-5.0	1.098
		9.66	30.39	40.05	ONE	0.630	270.7	0.0	168.5										
41990.0	42106.0	0.441	344.9	6.2	7.60	0.717	69.6	0.576	0.666	163.2	290.0	0.282D	1.049	-1.08	1.969	65.6	263.0	-1.7	1.161
		9.35	32.24	41.59	ONE	0.630	270.7	0.0	172.1										
42000.0	42106.0	0.430	345.3	6.8	6.81	0.690	72.1	0.590	0.647	166.5	283.3	0.266D	1.029	0.40	1.958	63.2	265.6	0.6	1.226
		9.11	34.17	43.27	ONE	0.630	270.7	0.0	174.8										
42010.0	42106.0	0.422	352.4	7.2	6.35	0.660	75.6	0.605	0.629	170.1	276.9	0.248D	1.010	1.64	1.947	60.7	268.1	2.2	1.292
		8.92	36.12	45.04	ONE	0.630	270.7	0.0	176.6										
42020.0	42106.0	0.418	359.7	7.2	6.12	0.630	80.4	0.623	0.613	174.0	270.8	0.231D	0.994	2.77	1.936	58.2	270.4	3.4	1.358
		8.84	38.08	46.92	ONE	0.630	270.7	0.0	176.6										
42030.0	42106.0	0.424	352.9	6.4	6.09	0.603	87.2	0.644	0.599	178.4	265.0	0.214D	0.985	3.85	1.927	55.8	272.7	4.3	1.425
		8.96	40.07	49.03	ONE	0.630	270.7	0.0	175.3										
42040.0	42106.0	0.447	350.0	4.6	6.25	0.587	96.8	0.667	0.592	183.4	259.9	0.197D	0.987A	4.66	1.921	53.4	274.7	5.1	1.494
		9.49	42.12	51.61	ONE	0.630	270.7	0.0	173.6										
42050.0	42106.0	0.504	346.5	1.9	6.64	0.600	109.9	0.696	0.598	189.4	255.8	0.182D	1.013A	6.16	1.925	50.8	276.4	5.9	1.569
		10.83	44.35	55.18	ONE	0.630	270.7	0.0	171.9										
								ARRIVAL DATE = 2442108.0											
41960.0	42108.0	0.526	319.2	15.2	20.75	0.794	66.8	0.521	0.730	154.0	318.3	0.350D	1.110	-15.70	1.962	76.0	262.4	-31.4	0.989
		11.35	27.16	38.51	ONE	0.634	279.1	0.0	144.8										
41970.0	42108.0	0.458	330.4	10.1	13.03	0.776	68.2	0.525	0.713	156.7	311.5	0.339D	1.087	-7.49	1.953	73.8	262.0	-14.9	0.952
		9.74	26.07	35.81	ONE	0.634	279.1	0.0	157.5										
41980.0	42108.0	0.429	338.1	8.2	9.64	0.757	69.8	0.531	0.695	159.7	304.8	0.326D	1.064	-3.58	1.944	71.5	264.3	-6.7	0.990
		9.07	27.19	36.26	ONE	0.634	279.1	0.0	163.8										
41990.0	42108.0	0.410	344.1	7.8	7.82	0.735	71.9	0.539	0.678	162.9	298.1	0.312D	1.043	-1.23	1.935	69.2	267.0	-2.1	1.044
		8.65	28.78	37.43	ONE	0.634	279.1	0.0	167.7										
42000.0	42108.0	0.395	348.5	7.8	6.74	0.712	74.5	0.550	0.660	166.4	291.6	0.297D	1.023	0.44	1.925	67.0	269.6	0.7	1.101
		8.33	30.48	38.82	ONE	0.634	279.1	0.0	170.4										
42010.0	42108.0	0.384	351.3	7.9	6.09	0.687	77.9	0.562	0.644	170.2	285.4	0.282D	1.006	1.74	1.914	64.8	272.1	2.6	1.160
		8.10	32.21	40.31	ONE	0.634	279.1	0.0	172.5										
42020.0	42108.0	0.378	352.1	7.4	5.70	0.663	82.5	0.577	0.629	174.4	279.6	0.266D	0.992	2.85	1.905	62.6	274.4	4.0	1.218
		7.96	33.93	41.89	ONE	0.634	279.1	0.0	173.8										
42030.0	42108.0	0.382	350.8	6.2	5.53	0.643	88.9	0.594	0.618	179.2	274.2	0.251D	0.984	3.85	1.897	60.4	276.5	5.0	1.275
		8.04	35.64	43.68	ONE	0.634	279.1	0.0	174.4										
42040.0	42108.0	0.404	347.2	3.9	5.53	0.634	97.5	0.614	0.613	184.8	269.7	0.237D	0.989A	4.82	1.894	58.4	278.4	5.8	1.334
		8.52	37.36	45.88	ONE	0.634	279.1	0.0	174.1										
42050.0	42108.0	0.459	342.3	0.8	5.71	0.652	108.9	0.639	0.621	191.5	266.3	0.224D	1.019A	5.84	1.900	56.4	279.8	6.6	1.395
		9.77	39.19	48.97	ONE	0.634	279.1	0.0	173.3										
42060.0	42108.0	0.571	337.3	-2.5	6.10	0.723	122.5	0.676	0.662	200.2	264.8	0.215D	1.110A	6.96	1.926	54.4	280.5	7.4	1.468
		12.46	41.35	53.81	ONE	0.634	279.1	0.0	172.5										
								ARRIVAL DATE = 2442110.0											
41970.0	42110.0	0.462	327.0	15.5	16.48	0.787	68.9	0.497	0.721	156.4	319.0	0.362D	1.080	-10.72	1.919	76.7	266.2	-23.0	0.890
		9.82	24.22	34.04	ONE	0.644	287.1	0.0	149.4										
41980.0	42110.0	0.410	336.6	11.1	10.73	0.770	71.7	0.501	0.705	159.4	312.4	0.352D	1.058	-4.53	1.911	74.5	267.7	-9.4	0.894
		8.64	24.34	32.98	ONE	0.644	287.1	0.0	158.6										
41990.0	42110.0	0.383	343.0	9.4	8.10	0.751	73.8	0.507	0.689	162.8	305.9	0.340D	1.037	-1.44	1.902	72.4	270.4	-2.8	0.937
		8.08	25.62	33.70	ONE	0.644	287.1	0.0	163.0										
42000.0	42110.0	0.365	347.5	8.8	6.66	0.731	76.5	0.514	0.673	166.5	299.6	0.327D	1.018	0.49	1.893	70.4	272.0	0.9	0.988
		7.69	27.12	34.81	ONE	0.644	287.1	0.0	165.9										
42010.0	42110.0	0.352	350.0	8.3	5.80	0.711	79.9	0.524	0.658	170.5	293.6	0.313D	1.002	1.88	1.884	68.4	275.6	3.2	1.039
		7.41	28.65	36.06	ONE	0.644	287.1	0.0	168.1										
42020.0	42110.0	0.344	350.4	7.4	5.28	0.692	84.4	0.535	0.645	175.1	288.1	0.300D	0.990	2.99	1.876	66.4	277.9	4.7	1.090
		7.25	30.15	37.40	ONE	0.644	287.1	0.0	169.7										
42030.0	42110.0	0.346	348.3	5.6	4.98	0.677	90.3	0.549	0.636	180.3	283.2	0.287D	0.984A	3.94	1.870	64.6	279.9	5.8	1.140
		7.30	31.61	38.91	ONE	0.644	287.1	0.0	170.8										
42040.0	42110.0	0.369	344.1	2.8	4.86	0.674	98.2	0.566	0.633	186.4	279.2	0.275D	0.992A	4.82	1.868	62.9	281.6	6.7	1.188
		7.76	33.05	40.82	ONE	0.644	287.1	0.0	171.3										
42050.0	42110.0	0.424	338.8	-0.7	4.89	0.696	108.4	0.589	0.645	194.0	276.6	0.265D	1.025A	5.68	1.876	61.3	282.7	7.6	1.238
		8.97	34.54	43.52	ONE	0.644	287.1	0.0	171.3										
42060.0	42110.0	0.534	333.9	-4.0	5.09	0.765	120.4	0.625	0.691	203.7	276.2	0.259D	1.122A	6.59	1.903	59.8	283.0	8.4	1.296
		11.54	36.26	47.80	ONE	0.644	287.1	0.0	170.7										
								ARRIVAL DATE = 2442112.0											
41970.0	42112.0	0.521	320.1	23.4	24.46	0.796	71.3	0.474	0.729	156.1	326.1	0.383D	1.074	-18.48	1.887	79.2	273.3	-39.7	0.920
		11.24	25.11	36.34	ONE	0.660	294.6	0.0	135.8										
41980.0	42112.0	0.401	334.2	14.9	12.50	0.781	73.2	0.475	0.713	159.3	319.8	0.375D	1.052	-6.15	1.879	77.3	270.6	-14.0	0.812
		8.45	21.93	30.38	ONE	0.660	294.6	0.0	152.4										
41990.0	42112.0	0.362	341.7	11.3	8.49	0.765	75.4	0.478	0.698	162.8	313.5	0.364D	1.032	-1.76	1.871	75.4	273.1	-3.8	0.840
		7.62	22.76	30.39	ONE	0.660	294.6	0.0	158.2										
42000.0	42112.0	0.339	346.3	9.6	6.56	0.748	78.2	0.483	0.684	166.7	307.4	0.353D	1.014	0.56	1.863	73.5	275.9	1.1	0.884
		7.16	24.07	31.23	ONE	0.660	294.6	0.0	161.2										
42010.0	42112.0	0.323	348.6	8.5	5.48	0.731	81.6	0.490	0.671	171.0	301.6	0.342D	0.999	2.07	1.855	71.6	278.5	3.9	0.930
		6.85	25.41	32.26	ONE	0.660	294.6	0.0	163.4										
42020.0	42112.0	0.314	348.4	7.0	4.82	0.716	85.9	0.499	0.659	175.9	296.4	0.331D	0.988	3.19	1.848	69.9	280.8	5.7	0.974
		6.67	26.72	33.40	ONE	0.660	294.6	0.0	165.1										
42030.0	42112.0	0.317	345.7	4.6	4.43	0.706	91.6	0.510	0.652	181.5	291.9	0.320D	0.985A	4.10	1.844	68.3	282.7	6.9	1.017
		6.72	27.98	34.70	ONE	0.660	294.6	0.0	166.3										
42040.0	42112.0	0.340	340.9	1.3	4.22	0.708	98.9	0.525	0.653	188.3	288.5	0.310D	0.995A	4.89	1.844	66.9	284.2	7.9	1.057
		7.18	29.18	36.36	ONE	0.660	294.6	0.0	167.0										
42050.0	42112.0	0.398	335.4	-2.4	4.15	0.733	108.1	0.546	0.668	196.6	286.7	0.303D	1.033A	5.64	1.854	65.7	285.1	8.7	1.098
		8.38	30.38	38.76	ONE	0.660	294.6	0.0	167.1										
42060.0	42112.0	0.506	330.8	-5.7	4.22	0.802	119.0	0.582	0.719	207.4	287.3	0.301D	1.137A	6.38	1.882	64.7	285.0	9.5	1.144
		10.87	31.73	42.61	ONE	0.660	294.6	0.0	166.5										
								ARRIVAL DATE = 2442114.0											
41960.0	42114.0	0.513	344.6	-47.6	-23.80	0.816	71.0	0.454	0.749	153.2	341.7	0.409D	1.090	29.68	1.865	84.3	284.4	61.7	1.044
		11.04	28.77	39.81	TWO	0.680	301.7	0.0	116.9										
41980.0	42114.0	0.413	330.1	20.6	16.02	0.790	74.5	0.453	0.721	159.3	326.8	0.395D	1.047	-9.54	1.851	79.8	273.4	-23.4	0.761
		8.72	20.42	29.14	ONE	0.680	301.7	0.0	143.9										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
41990.0	42114.0	0.346	340.1	13.4	9.07	0.776	76.8	0.454	0.707	163.0	320.7	0.386D	1.028	-2.29	1.843	78.0	275.0	-5.5	0.754
		7.29	20.21	27.50	ONE	0.680	301.7	0.0	152.8										
42000.0	42114.0	0.317	345.1	10.3	6.43	0.762	79.6	0.456	0.694	167.1	314.8	0.377D	1.011	0.67	1.836	76.2	278.0	1.5	0.791
		6.73	21.31	28.04	ONE	0.680	301.7	0.0	156.2										
42010.0	42114.0	0.299	347.2	8.3	5.09	0.748	83.0	0.461	0.682	171.6	309.4	0.368D	0.996	2.34	1.829	74.6	280.7	5.0	0.832
		6.39	22.51	28.90	ONE	0.680	301.7	0.0	158.5										
42020.0	42114.0	0.290	346.5	6.2	4.32	0.736	87.2	0.467	0.673	176.8	304.5	0.358D	0.987	3.47	1.823	73.1	283.1	7.0	0.871
		6.21	23.66	29.87	ONE	0.680	301.7	0.0	160.1										
42030.0	42114.0	0.293	343.1	3.3	3.86	0.730	92.6	0.476	0.667	182.9	300.4	0.349D	0.986A	4.33	1.820	71.7	285.0	8.3	0.907
		6.27	24.72	31.00	ONE	0.680	301.7	0.0	161.4										
42040.0	42114.0	0.318	337.8	-0.5	3.59	0.736	99.5	0.489	0.670	190.2	297.6	0.342D	0.999A	5.04	1.822	70.5	286.3	9.2	0.940
		6.75	25.72	32.47	ONE	0.680	301.7	0.0	162.1										
42050.0	42114.0	0.378	332.2	-4.3	3.45	0.764	108.0	0.510	0.689	199.3	296.5	0.338D	1.041A	5.68	1.833	69.6	286.9	10.1	0.973
		7.96	26.68	34.64	ONE	0.680	301.7	0.0	162.1										
42060.0	42114.0	0.486	327.9	-7.5	3.43	0.832	117.9	0.547	0.745	211.0	298.0	0.338D	1.153A	6.29	1.863	69.0	286.3	10.9	1.009
		10.39	27.75	38.14	ONE	0.680	301.7	0.0	161.2										
								ARRIVAL DATE = 2442116.0											
41960.0	42116.0	0.387	341.3	-31.4	-10.54	0.821	71.8	0.440	0.754	153.0	347.8	0.422D	1.086	16.68	1.838	86.3	268.3	46.3	0.728
		8.14	19.45	27.60	TWO	0.703	308.5	0.0	121.8										
41970.0	42116.0	0.563	352.0	-51.8	-29.87	0.810	73.7	0.435	0.741	156.1	341.5	0.418D	1.063	36.23	1.831	84.4	303.6	67.6	1.165
		12.27	32.37	44.64	TWO	0.703	308.5	0.0	112.3										
41980.0	42116.0	0.519	320.3	29.7	27.00	0.798	75.5	0.434	0.728	159.4	333.5	0.412D	1.043	-20.41	1.825	82.0	281.7	-47.4	0.856
		11.20	23.23	34.42	ONE	0.703	308.5	0.0	127.2										
41990.0	42116.0	0.337	338.0	16.2	10.08	0.786	77.9	0.433	0.715	163.2	327.7	0.405D	1.024	-3.24	1.818	80.4	276.3	-8.6	0.678
		7.11	18.00	25.11	ONE	0.703	308.5	0.0	146.8										
42000.0	42116.0	0.299	343.9	10.7	6.25	0.774	80.7	0.434	0.703	167.5	322.0	0.398D	1.007	0.82	1.811	78.8	279.4	2.1	0.707
		6.37	18.85	25.22	ONE	0.703	308.5	0.0	150.8										
42010.0	42116.0	0.279	345.9	7.7	4.62	0.762	84.1	0.436	0.692	172.3	316.8	0.390D	0.994	2.71	1.805	77.2	282.3	6.4	0.744
		6.01	19.92	25.94	ONE	0.703	308.5	0.0	153.1										
42020.0	42116.0	0.269	344.6	4.9	3.75	0.754	88.3	0.441	0.684	177.8	312.3	0.383D	0.986	3.85	1.801	75.9	284.7	8.7	0.778
		5.84	20.93	26.77	ONE	0.703	308.5	0.0	154.8										
42030.0	42116.0	0.274	340.6	1.4	3.24	0.751	93.5	0.448	0.681	184.3	308.6	0.376D	0.987A	4.65	1.799	74.7	286.6	10.0	0.809
		5.92	21.84	27.77	ONE	0.703	308.5	0.0	156.0										
42040.0	42116.0	0.301	334.9	-2.6	2.93	0.759	100.0	0.460	0.687	192.2	306.3	0.371D	1.003A	5.27	1.802	73.8	287.8	11.0	0.837
		6.43	22.66	29.09	ONE	0.703	308.5	0.0	156.7										
42050.0	42116.0	0.363	329.3	-6.4	2.76	0.789	108.0	0.481	0.709	202.0	305.9	0.368D	1.049A	5.81	1.815	73.1	288.0	11.7	0.863
		7.65	23.43	31.08	ONE	0.703	308.5	0.0	156.5										
42060.0	42116.0	0.471	325.5	-9.2	2.68	0.857	117.2	0.520	0.769	214.4	308.1	0.370D	1.169A	6.30	1.845	72.8	286.9	12.5	0.892
		10.05	24.29	34.33	ONE	0.703	308.5	0.0	155.2										
								ARRIVAL DATE = 2442118.0											
41960.0	42118.0	0.350	338.4	-22.1	-5.36	0.825	72.4	0.429	0.758	152.8	353.9	0.433D	1.083	11.74	1.814	88.2	263.6	37.8	0.602
		7.39	15.75	23.14	TWO	0.729	315.0	0.0	119.5										
41970.0	42118.0	0.356	347.6	-29.6	-9.89	0.815	74.4	0.422	0.745	156.0	347.3	0.431D	1.060	16.43	1.808	86.2	272.5	46.5	0.703
		7.49	18.74	26.23	TWO	0.729	315.0	0.0	120.5										
41990.0	42118.0	0.343	334.4	21.0	12.43	0.794	78.9	0.416	0.721	163.5	334.5	0.421D	1.021	-5.54	1.795	82.6	277.0	-16.0	0.622
		7.24	16.35	23.59	ONE	0.729	315.0	0.0	139.2										
42000.0	42118.0	0.283	343.0	10.7	5.96	0.783	81.7	0.415	0.710	167.9	329.0	0.416D	1.005	1.10	1.790	81.0	279.9	3.1	0.633
		6.08	16.68	22.76	ONE	0.729	315.0	0.0	144.8										
42010.0	42118.0	0.261	344.9	6.4	3.98	0.774	85.1	0.416	0.701	173.0	324.0	0.409D	0.993	3.25	1.784	79.6	283.1	8.6	0.667
		5.70	17.67	23.37	ONE	0.729	315.0	0.0	147.1										
42020.0	42118.0	0.252	343.1	3.0	3.06	0.768	89.2	0.419	0.695	178.9	319.8	0.403D	0.986	4.36	1.781	78.4	285.6	11.0	0.697
		5.55	18.55	24.10	ONE	0.729	315.0	0.0	148.8										
42030.0	42118.0	0.258	338.5	-0.9	2.55	0.768	94.2	0.425	0.693	185.8	316.5	0.398D	0.988A	5.07	1.780	77.4	287.5	12.2	0.724
		5.66	19.33	24.98	ONE	0.729	315.0	0.0	150.1										
42040.0	42118.0	0.289	332.4	-5.0	2.24	0.779	100.5	0.437	0.701	194.1	314.7	0.395D	1.007A	5.59	1.784	76.6	288.5	13.1	0.747
		6.19	20.00	26.19	ONE	0.729	315.0	0.0	150.7										
42050.0	42118.0	0.352	327.0	-8.5	2.06	0.810	108.0	0.457	0.726	204.4	314.8	0.394D	1.057A	6.02	1.798	76.2	288.5	13.8	0.768
		7.42	20.62	28.05	ONE	0.729	315.0	0.0	150.3										
42060.0	42118.0	0.460	323.6	-10.9	1.96	0.876	116.6	0.499	0.790	217.4	317.6	0.396D	1.184A	6.39	1.829	76.2	286.9	14.5	0.791
		9.79	21.31	31.11	ONE	0.729	315.0	0.0	148.6										
								ARRIVAL DATE = 2442120.0											
41960.0	42120.0	0.335	336.4	-16.4	-2.59	0.828	72.9	0.420	0.761	152.7	360.0	0.442D	1.081	9.20	1.793	90.0	259.7	32.8	0.529
		7.08	13.64	20.72	TWO	0.756	321.3	0.0	113.5										
41970.0	42120.0	0.318	343.4	-17.8	-3.96	0.819	75.0	0.412	0.749	156.0	353.4	0.441D	1.058	10.69	1.787	88.1	267.1	35.5	0.570
		6.74	14.83	21.57	TWO	0.756	321.3	0.0	118.4										
41980.0	42120.0	0.324	352.6	-28.0	-6.09	0.810	77.2	0.406	0.738	159.6	347.2	0.438D	1.037	15.92	1.781	86.3	275.9	46.4	0.673
		6.86	17.85	24.71	TWO	0.756	321.3	0.0	119.0										
41990.0	42120.0	0.469	332.5	33.0	24.76	0.800	79.6	0.402	0.727	163.7	340.8	0.435D	1.019	-17.83	1.776	84.5	282.6	-48.0	0.728
		10.00	19.45	29.46	ONE	0.756	321.3	0.0	121.5										
42000.0	42120.0	0.268	342.5	9.9	5.41	0.791	82.4	0.399	0.717	168.3	335.7	0.430D	1.003	1.63	1.770	83.1	279.5	5.0	0.570
		5.82	14.82	20.64	ONE	0.756	321.3	0.0	138.0										
42010.0	42120.0	0.246	344.5	4.0	3.07	0.784	85.8	0.399	0.709	173.6	330.9	0.426D	0.991	4.08	1.766	81.8	283.0	11.9	0.602
		5.44	15.76	21.20	ONE	0.756	321.3	0.0	140.2										
42020.0	42120.0	0.238	342.1	0.2	2.19	0.779	89.9	0.401	0.703	179.8	326.9	0.421D	0.986	5.07	1.763	80.7	285.8	14.2	0.629
		5.31	16.54	21.86	ONE	0.756	321.3	0.0	142.1										
42030.0	42120.0	0.246	336.9	-3.8	1.74	0.781	94.8	0.407	0.703	187.1	324.1	0.417D	0.989A	5.63	1.763	79.8	287.6	15.2	0.651
		5.45	17.19	22.64	ONE	0.756	321.3	0.0	143.5										
42040.0	42120.0	0.279	330.5	-7.6	1.48	0.794	100.8	0.418	0.713	195.8	322.6	0.415D	1.010A	6.02	1.768	79.2	288.5	15.8	0.669
		6.01	17.74	23.75	ONE	0.756	321.3	0.0	144.0										
42050.0	42120.0	0.344	325.1	-10.7	1.32	0.826	107.9	0.439	0.740	206.6	323.2	0.415D	1.065A	6.31	1.783	79.0	288.1	16.3	0.686
		7.26	18.24	25.50	ONE	0.756	321.3	0.0	143.5										
42060.0	42120.0	0.452	322.1	-12.6	1.23	0.891	116.2	0.483	0.807	219.8	326.3	0.417D	1.197A	6.55	1.814	79.2	285.9	16.7	0.706
		9.60	18.82	28.42	ONE	0.756	321.3	0.0	141.4										
								ARRIVAL DATE = 2442122.0											
41960.0	42122.0	0.328	335.0	-12.5	-0.82	0.831	73.3	0.414	0.763	152.6	365.9	0.448	1.079	7.68	1.775	91.7	255.2	29.4	0.483
		6.93	12.30	19.23	TWO	0.784	327.3	0.0	105.5										
41970.0	42122.0	0.306	340.9	-11.3	-1.14	0.822	75.4	0.404	0.752	155.9	359.3	0.448D	1.056	8.03	1.770	89.8	262.9	29.5	0.502
		6.51	12.85	19.36	TWO	0.784	327.3	0.0	112.1										
41980.0	42122.0	0.285	346.2	-11.8	-1.94	0.814	77.6	0.396	0.741	159.7	353.1	0.447D	1.035	8.87	1.764	88.0	269.6	30.9	0.529
		6.13	13.64	19.77	TWO	0.784	327.3	0.0	117.3										

DEPART	APRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / COIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
41990.0	42122.0	0.288	355.2	-25.0	-7.45	0.805	80.2	0.391	0.731	163.9	347.4	0.445D	1.017	14.43	1.759	86.5	277.7	44.3	0.627
		6.17	16.48	22.66	TWO	0.784	327.3	0.0	117.6										
42000.0	42122.0	0.252	343.5	6.4	3.92	0.798	83.0	0.387	0.722	168.7	342.1	0.442D	1.002	3.10	1.754	85.0	278.2	10.5	0.520
		5.56	13.37	18.92	ONE	0.784	327.3	0.0	130.0										
42010.0	42122.0	0.232	345.2	-0.5	1.57	0.791	86.4	0.386	0.715	174.2	337.5	0.439D	0.990	5.49	1.750	83.8	282.2	17.5	0.552
		5.23	14.32	19.54	ONE	0.784	327.3	0.0	132.3										
42020.0	42122.0	0.226	342.C	-3.9	1.00	0.789	90.4	0.387	0.711	180.6	333.8	0.435D	0.986A	6.10	1.747	82.8	285.1	18.7	0.574
		5.14	14.95	20.08	ONE	0.784	327.3	0.0	134.5										
42030.0	42122.0	0.237	335.9	-7.3	0.75	0.792	95.2	0.392	0.712	188.2	331.2	0.433D	0.991A	6.39	1.748	82.0	286.9	19.0	0.591
		5.30	15.45	20.75	ONE	0.784	327.3	0.0	136.0										
42040.0	42122.0	0.272	329.2	-10.6	0.61	0.806	101.0	0.403	0.722	197.3	330.1	0.431D	1.014A	6.57	1.754	81.5	287.6	19.1	0.606
		5.88	15.87	21.76	ONE	0.784	327.3	0.0	136.6										
42050.0	42122.0	0.338	323.9	-13.0	0.54	0.838	107.9	0.425	0.751	208.3	331.0	0.432D	1.071A	6.70	1.769	81.5	286.9	19.2	0.620
		7.14	16.27	23.41	ONE	0.784	327.3	0.0	135.9										
42060.0	42122.0	0.445	321.2	-14.3	0.49	0.902	115.8	0.471	0.820	221.8	334.2	0.434D	1.206A	6.80	1.800	81.8	284.1	19.3	0.637
		9.44	16.79	26.23	ONE	0.784	327.3	0.0	133.5										

ARRIVAL DATE = 2442124.0

41960.0	42124.0	0.325	334.1	-9.6	0.42	0.832	73.4	0.410	0.765	152.5	371.6	0.451	1.079	6.67	1.760	93.4	250.2	26.6	0.455
		6.88	11.51	18.38	TWO	0.813	333.2	0.0	96.2										
41970.0	42124.0	0.301	339.3	-7.2	0.55	0.825	75.6	0.399	0.754	155.8	365.1	0.454	1.055	6.52	1.755	91.4	258.3	25.6	0.461
		6.42	11.68	18.10	TWO	0.813	333.2	0.0	103.5										
41980.0	42124.0	0.279	343.3	-4.6	0.81	0.817	77.9	0.390	0.744	159.7	359.0	0.454D	1.034	6.23	1.749	89.7	265.3	23.9	0.470
		6.01	11.92	17.93	TWO	0.813	333.2	0.0	110.1										
41990.0	42124.0	0.258	345.C	-0.8	1.66	0.809	80.5	0.383	0.734	164.0	353.3	0.453D	1.016	5.36	1.744	88.1	271.1	20.0	0.475
		5.65	12.C8	17.74	TWO	0.813	333.2	0.0	116.0										
42000.0	42124.0	0.389	6.6	-46.1	-19.75	0.803	83.4	0.378	0.726	168.9	348.1	0.451D	1.001	26.74	1.740	86.8	293.2	67.3	0.847
		8.20	22.97	31.17	ONE	0.813	333.2	0.0	107.2										
42010.0	42124.0	0.225	348.5	-10.4	-1.42	0.797	86.8	0.376	0.720	174.6	343.8	0.449D	0.990	8.40	1.736	85.6	280.8	28.3	0.533
		5.11	13.74	18.85	ONE	0.813	333.2	0.0	122.4										
42020.0	42124.0	0.219	343.1	-10.1	-0.75	0.796	90.8	0.376	0.716	181.2	340.3	0.447D	0.986A	7.70	1.734	84.6	283.5	25.5	0.538
		5.03	13.90	18.92	ONE	0.813	333.2	0.0	125.7										
42030.0	42124.0	0.231	336.C	-11.9	-0.52	0.800	95.5	0.381	0.718	189.1	337.9	0.445D	0.992A	7.44	1.736	84.0	285.3	24.1	0.547
		5.20	14.16	19.36	ONE	0.813	333.2	0.0	127.7										
42040.0	42124.0	0.267	328.7	-14.0	-0.41	0.815	101.1	0.392	0.730	198.4	337.1	0.444D	1.016A	7.30	1.742	83.6	285.8	23.3	0.557
		5.80	14.44	20.23	ONE	0.813	333.2	0.0	128.4										
42050.0	42124.0	0.333	323.3	-15.4	-0.34	0.847	107.8	0.415	0.760	209.7	338.2	0.445D	1.075A	7.21	1.757	83.6	284.7	22.7	0.567
		7.04	14.75	21.79	ONE	0.813	333.2	0.0	127.7										
42060.0	42124.0	0.439	320.8	-15.9	-0.30	0.909	115.4	0.461	0.829	223.1	341.4	0.447D	1.211A	7.14	1.788	84.2	281.4	22.3	0.583
		9.30	15.22	24.52	ONE	0.813	333.2	0.0	124.9										

ARRIVAL DATE = 2442126.0

41960.0	42126.0	0.325	333.4	-7.4	1.37	0.834	73.4	0.409	0.766	152.3	377.1	0.453	1.080	5.96	1.748	94.9	244.8	24.0	0.444
		6.89	11.18	18.07	TWO	0.843	339.0	0.0	86.2										
41970.0	42126.0	0.301	338.3	-4.3	1.69	0.826	75.7	0.396	0.756	155.7	370.6	0.457	1.055	5.55	1.743	93.0	253.2	22.5	0.439
		6.41	11.05	17.46	TWO	0.843	339.0	0.0	93.9										
41980.0	42126.0	0.278	341.7	-0.6	2.29	0.819	78.1	0.386	0.746	159.6	364.6	0.458	1.034	4.87	1.737	91.3	260.5	19.7	0.438
		5.99	10.99	16.98	TWO	0.843	339.0	0.0	100.9										
41990.0	42126.0	0.259	342.4	5.1	3.73	0.812	80.7	0.377	0.737	164.0	359.0	0.459D	1.015	3.34	1.733	89.7	266.8	13.4	0.435
		5.67	10.91	16.58	TWO	0.843	339.0	0.0	107.3										
42000.0	42126.0	0.290	333.6	23.5	11.02	0.806	83.7	0.372	0.729	169.1	354.1	0.458D	1.000	-4.04	1.728	88.4	272.1	-15.8	0.448
		6.21	11.29	17.50	TWO	0.843	339.0	0.0	112.2										
42010.0	42126.0	0.276	C.2	-36.0	-10.71	0.802	87.0	0.368	0.723	174.9	349.6	0.457D	0.990	17.61	1.725	87.2	282.0	54.2	0.643
		5.96	16.96	22.91	ONE	0.843	339.0	0.0	108.6										
42020.0	42126.C	0.221	346.6	-20.3	-3.67	0.801	91.0	0.368	0.721	181.7	346.4	0.455D	0.986A	10.48	1.724	86.3	281.3	35.9	0.533
		5.06	13.75	18.81	ONE	0.843	339.0	0.0	115.7										
42030.0	42126.0	0.229	337.3	-18.0	-2.25	0.806	95.6	0.372	0.723	189.6	344.2	0.454D	0.993A	8.97	1.725	85.7	282.8	30.9	0.522
		5.17	13.44	18.61	ONE	0.843	339.0	0.0	118.5										
42040.0	42126.C	0.264	329.1	-18.0	-1.66	0.821	101.2	0.383	0.736	199.2	343.6	0.454D	1.017A	8.29	1.732	85.5	283.1	28.4	0.523
		5.75	13.47	19.22	ONE	0.843	339.0	0.0	119.5										
42050.0	42126.0	0.330	323.4	-18.0	-1.35	0.853	107.6	0.407	0.765	210.5	344.7	0.454D	1.077A	7.88	1.747	85.6	281.6	26.8	0.530
		6.97	13.66	20.64	ONE	0.843	339.0	0.0	118.8										
42060.0	42126.0	0.433	320.9	-17.7	-1.17	0.913	115.0	0.453	0.833	223.9	347.9	0.456D	1.211A	7.59	1.777	86.2	277.9	25.5	0.545
		9.17	14.10	23.27	ONE	0.843	339.0	0.0	115.9										

ARRIVAL DATE = 2442128.0

41960.0	42128.0	0.329	333.C	-5.6	2.13	0.834	73.2	0.410	0.767	152.0	382.5	0.452	1.081	5.45	1.738	96.5	239.7	21.5	0.448
		6.95	11.28	18.23	TWO	0.872	344.6	0.0	76.2										
41970.0	42128.0	0.303	337.7	-2.1	2.53	0.827	75.6	0.396	0.757	155.5	376.0	0.457	1.056	4.89	1.733	94.5	248.0	19.9	0.433
		6.45	10.87	17.32	TWO	0.872	344.6	0.0	83.7										
41980.0	42128.0	0.279	340.8	1.9	3.23	0.820	78.1	0.384	0.747	159.4	370.0	0.460	1.034	4.03	1.728	92.8	255.4	16.7	0.423
		6.02	10.58	16.60	TWO	0.872	344.6	0.0	90.8										
41990.0	42128.0	0.261	341.3	7.7	4.66	0.814	80.8	0.374	0.739	163.9	364.6	0.462	1.015	2.45	1.724	91.2	262.0	10.2	0.415
		5.71	10.34	16.05	TWO	0.872	344.6	0.0	97.2										
42000.0	42128.0	0.269	336.0	19.7	8.88	0.809	83.8	0.368	0.731	169.0	359.7	0.462D	1.000	-1.92	1.720	89.9	267.5	-7.9	0.416
		5.84	10.38	16.22	TWO	0.872	344.6	0.0	102.7										
42020.0	42128.0	0.260	355.3	-36.7	-9.74	0.804	91.0	0.363	0.724	181.8	352.0	0.461D	0.986A	16.41	1.716	87.9	279.6	53.2	0.604
		5.69	15.83	21.52	ONE	0.872	344.6	0.0	104.7										
42030.0	42128.0	0.235	340.7	-26.3	-4.85	0.810	95.6	0.366	0.727	189.9	350.1	0.461D	0.993A	11.37	1.717	87.3	279.5	40.0	0.526
		5.27	13.54	18.81	ONE	0.872	344.6	0.0	108.8										
42040.0	42128.0	0.264	330.6	-22.8	-3.29	0.825	101.1	0.377	0.739	199.5	349.5	0.460D	1.018A	9.66	1.724	87.1	279.4	34.6	0.509
		5.75	13.C6	18.81	ONE	0.872	344.6	0.0	110.2										
42050.0	42128.0	0.327	324.2	-21.0	-2.55	0.856	107.4	0.401	0.769	210.9	350.7	0.461D	1.077A	8.76	1.739	87.3	277.7	31.3	0.509
		6.92	13.C5	19.97	ONE	0.872	344.6	0.0	109.5										
42060.0	42128.0	0.427	321.4	-19.5	-2.14	0.914	114.6	0.447	0.835	224.1	353.7	0.462D	1.208A	8.17	1.768	88.1	273.7	28.8	0.522
		9.04	13.43	22.48	ONE	0.872	344.6	0.0	106.6										

ARRIVAL DATE = 2442130.0

41960.0	42130.0	0.335	332.7	-4.2	2.77	0.834	72.8	0.414	0.767	151.7	387.9	0.449	1.084	5.07	1.731	98.0	235.3	19.0	0.464
		7.07	11.76	18.83	TWO	0.902	350.2	0.0	66.6										
41970.0	42130.0	0.307	337.3	-0.5	3.19	0.827	75.3	0.398	0.757	155.1	381.3	0.456	1.058	4.41	1.726	96.0	243.1	17.4	0.441
		6.54	11.C9	17.63	TWO	0.902	350.2	0.0	73.7										
41980.0	42130.0	0.283	340.4	3.7	3.89	0.821	77.9	0.384	0.748	159.1	375.3	0.460	1.035	3.48	1.722	94.2	250.4	14.3	0.423
		6.09	10.58	16.67	TWO	0.902	350.2	0.0	80.5										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
41990.0	42130.0	C.264	341.C	9.3	5.20	0.815	80.7	0.374	0.739	163.6	369.9	0.463	1.016	1.96	1.717	92.7	257.0	8.2	0.410
		5.76	10.20	15.95	TWO	0.902	350.2	0.0	86.8										
42000.0	42130.0	0.263	337.1	18.4	8.21	0.810	83.7	0.366	0.732	168.8	365.1	0.464	1.000	-1.27	1.714	91.4	262.5	-5.4	0.405
		5.74	10.06	15.81	TWO	0.902	350.2	0.0	92.3										
42010.0	42130.0	0.390	323.2	36.2	20.86	0.807	87.1	0.361	0.727	174.9	361.4	0.465	0.990	-14.12	1.711	90.4	267.8	-49.8	0.546
		8.23	14.14	22.37	TWO	0.902	350.2	0.0	94.9										
42020.0	42130.0	C.504	11.8	-53.5	-29.39	0.806	90.9	0.359	0.725	181.6	356.9	0.465D	0.986A	35.93	1.710	89.2	307.9	83.7	1.009
		10.82	27.75	38.57	ONE	0.902	350.2	0.0	94.7										
42030.0	42130.0	0.264	347.8	-37.6	-9.26	0.812	95.5	0.362	0.729	189.9	355.4	0.465D	0.993A	15.59	1.711	88.8	275.7	52.6	0.579
		5.75	15.08	20.83	ONE	0.902	350.2	0.0	99.3										
42040.0	42130.0	0.270	333.8	-29.0	-5.54	0.827	100.9	0.373	0.741	199.5	355.0	0.464D	1.017A	11.66	1.718	88.6	275.0	42.0	0.519
		5.86	13.34	19.19	ONE	0.902	350.2	0.0	100.9										
42050.0	42130.0	0.327	325.9	-24.5	-4.04	0.857	107.1	0.396	0.769	210.8	356.1	0.465D	1.074A	9.94	1.733	88.9	273.1	36.3	0.505
		6.91	12.94	19.85	ONE	0.902	350.2	0.0	100.3										
42060.0	42130.0	0.422	322.5	-21.6	-3.26	0.912	114.2	0.442	0.833	223.8	359.0	0.465D	1.200A	8.93	1.761	89.7	269.1	32.1	0.514
		8.93	13.19	22.12	ONE	0.902	350.2	0.0	97.5										
ARRIVAL DATE = 2442132.0																			
41960.0	42132.0	0.343	332.6	-3.0	3.33	0.834	72.3	0.420	0.766	151.4	392.9	0.444	1.089	4.78	1.727	99.6	231.9	16.7	0.493
		7.24	12.58	19.82	TWO	0.931	355.7	0.0	57.8										
41970.0	42132.0	C.314	337.3	0.7	3.73	0.827	74.9	0.402	0.757	154.8	386.4	0.452	1.061	4.05	1.723	97.5	239.1	15.2	0.461
		6.67	11.68	18.35	TWO	0.931	355.7	0.0	64.3										
41980.0	42132.0	0.289	340.4	5.0	4.39	0.821	77.6	0.387	0.748	158.7	380.4	0.458	1.037	3.09	1.718	95.7	245.9	12.2	0.437
		6.19	10.96	17.15	TWO	0.931	355.7	0.0	70.7										
41990.0	42132.0	0.268	341.1	10.2	5.55	0.815	80.4	0.375	0.740	163.2	375.0	0.462	1.017	1.64	1.714	94.1	252.2	6.7	0.417
		5.83	10.41	16.24	TWO	0.931	355.7	0.0	76.6										
42000.0	42132.0	C.262	338.2	17.8	7.89	0.810	83.5	0.366	0.733	168.4	370.3	0.464	1.001	-0.96	1.710	92.7	257.7	-4.0	0.407
		5.72	10.12	15.84	TWO	0.931	355.7	0.0	82.0										
42010.0	42132.0	0.310	328.7	30.4	14.31	0.807	86.9	0.360	0.728	174.5	366.4	0.466	0.990	-7.65	1.707	91.7	262.0	-30.4	0.448
		6.60	11.30	17.90	TWO	0.931	355.7	0.0	86.7										
42030.0	42132.0	0.365	1.4	-49.8	-18.58	0.813	95.2	0.360	0.729	189.4	360.2	0.466	0.992A	24.72	1.708	90.1	271.2	70.9	0.756
		7.68	20.27	27.95	ONE	0.931	355.7	0.0	91.8										
42040.0	42132.0	0.289	335.5	-36.7	-8.95	0.827	100.6	0.371	0.741	199.1	360.0	0.466D	1.015A	14.83	1.714	90.0	269.9	51.2	0.563
		6.20	14.62	20.82	ONE	0.931	355.7	0.0	92.6										
42050.0	42132.0	C.329	328.7	-28.7	-5.99	0.856	106.7	0.393	0.768	210.3	361.1	0.466	1.070A	11.60	1.728	90.3	268.1	41.9	0.521
		6.96	13.39	20.35	ONE	0.931	355.7	0.0	91.8										
42060.0	42132.0	0.418	324.3	-23.9	-4.61	0.908	113.7	0.437	0.828	223.1	363.7	0.466	1.189A	9.93	1.755	91.1	264.5	35.6	0.520
		8.83	13.38	22.20	ONE	0.931	355.7	0.0	89.0										
ARRIVAL DATE = 2442134.0																			
41960.0	42134.0	0.355	332.7	-2.1	3.82	0.833	71.6	0.429	0.766	151.0	398.1	0.437	1.094	4.56	1.726	101.2	229.5	14.7	0.531
		7.47	13.70	21.17	TWO	0.960	1.3	0.0	49.9										
41970.0	42134.0	0.324	337.4	1.7	4.19	0.826	74.3	0.409	0.756	154.3	391.5	0.447	1.065	3.78	1.721	99.0	236.0	13.2	0.493
		6.85	12.58	19.43	TWO	0.960	1.3	0.0	55.8										
41980.0	42134.0	C.296	340.6	5.9	4.80	0.820	77.1	0.393	0.747	158.2	385.4	0.454	1.040	2.80	1.717	97.1	242.3	10.4	0.461
		6.33	11.67	18.00	TWO	0.960	1.3	0.0	61.6										
41990.0	42134.0	C.274	341.7	10.9	5.81	0.815	80.0	0.379	0.739	162.7	380.0	0.459	1.019	1.43	1.713	95.5	248.2	5.6	0.436
		5.93	10.96	16.89	TWO	0.960	1.3	0.0	67.0										
42000.0	42134.0	0.264	339.4	17.4	7.68	0.810	83.1	0.369	0.732	167.9	375.2	0.462	1.002	-0.78	1.709	94.1	253.3	-3.1	0.421
		5.74	10.51	16.25	TWO	0.960	1.3	0.0	72.1										
42010.0	42134.0	0.285	332.2	26.9	11.86	0.807	86.6	0.362	0.727	173.9	371.3	0.464	0.990	-5.27	1.706	93.0	257.4	-21.2	0.433
		6.13	10.86	16.99	TWO	0.960	1.3	0.0	77.1										
42020.0	42134.0	C.472	320.1	39.3	27.09	0.807	90.6	0.359	0.725	181.0	368.8	0.465	0.986A	-20.82	1.705	92.3	256.4	-63.8	0.675
		10.06	17.89	27.95	TWO	0.960	1.3	0.0	83.5										
42040.0	42134.0	0.342	349.8	-45.8	-14.84	0.825	100.1	0.369	0.739	198.3	364.4	0.466	1.013A	20.48	1.713	91.2	263.1	63.2	0.671
		7.21	17.79	25.00	ONE	0.960	1.3	0.0	86.3										
42050.0	42134.0	C.339	333.3	-34.1	-8.73	0.853	106.2	0.391	0.765	209.4	365.5	0.466	1.064A	14.05	1.726	91.5	262.9	48.3	0.561
		7.16	14.56	21.72	ONE	0.960	1.3	0.0	84.5										
42060.0	42134.0	0.415	326.8	-26.8	-6.31	0.903	113.1	0.433	0.820	221.9	367.9	0.465	1.176A	11.30	1.751	92.4	260.2	39.3	0.541
		8.77	13.99	22.76	ONE	0.960	1.3	0.0	81.4										
ARRIVAL DATE = 2442136.0																			
41960.0	42136.0	0.369	332.9	-1.4	4.28	0.832	70.7	0.441	0.764	150.7	403.2	0.427	1.101	4.41	1.728	102.9	228.0	12.9	0.579
		7.77	15.10	22.87	TWO	0.988	6.8	0.0	42.9										
41970.0	42136.0	C.336	337.7	2.4	4.60	0.825	73.5	0.419	0.755	153.8	396.5	0.439	1.071	3.58	1.723	100.6	234.0	11.4	0.533
		7.09	13.76	20.85	TWO	0.988	6.8	0.0	48.2										
41980.0	42136.0	0.306	341.2	6.6	5.13	0.819	76.4	0.400	0.746	157.6	390.4	0.448	1.044	2.58	1.718	98.6	239.7	8.9	0.496
		6.51	12.67	19.18	TWO	0.988	6.8	0.0	53.4										
41990.0	42136.0	0.282	342.6	11.3	6.02	0.813	79.4	0.385	0.738	162.0	384.9	0.454	1.022	1.27	1.714	96.8	245.0	4.7	0.465
		6.07	11.79	17.86	TWO	0.988	6.8	0.0	58.4										
42000.0	42136.0	C.267	340.9	17.1	7.55	0.809	82.6	0.373	0.731	167.2	380.0	0.458	1.004	-0.66	1.710	95.4	249.8	-2.5	0.444
		5.81	11.18	16.99	TWO	0.988	6.8	0.0	63.1										
42010.0	42136.0	0.275	335.1	24.7	10.56	0.805	86.1	0.365	0.726	173.1	376.0	0.461	0.991	-4.05	1.708	94.3	253.7	-15.8	0.442
		5.95	11.13	17.08	TWO	0.988	6.8	0.0	67.8										
42020.0	42136.0	0.357	324.8	34.8	18.39	0.805	90.1	0.361	0.724	180.1	373.2	0.463	0.986A	-12.25	1.707	93.5	254.9	-43.2	0.528
		7.52	13.61	21.13	TWO	0.988	6.8	0.0	74.2										
42040.0	42136.0	C.495	6.3	-52.5	-27.38	0.822	99.5	0.369	0.737	197.1	368.2	0.465	1.009A	32.79	1.713	92.2	238.2	79.7	0.943
		10.60	25.78	36.38	ONE	0.988	6.8	0.0	83.6										
42050.0	42136.0	0.366	340.7	-40.7	-12.94	0.848	105.6	0.390	0.761	208.0	369.5	0.464	1.057A	17.98	1.726	92.7	257.0	56.4	0.639
		7.72	16.84	24.56	ONE	0.988	6.8	0.0	79.2										
42060.0	42136.0	0.416	330.4	-30.5	-8.57	0.895	112.5	0.429	0.811	220.4	371.8	0.463	1.160A	13.23	1.749	93.5	256.2	43.6	0.579
		8.80	15.10	23.90	ONE	0.988	6.8	0.0	75.2										
ARRIVAL DATE = 2442138.0																			
41960.0	42138.0	0.386	333.1	-0.9	4.72	0.830	69.5	0.456	0.763	150.3	408.3	0.415	1.110	4.29	1.732	104.6	227.5	11.4	0.636
		8.14	16.75	24.89	TWO	1.016	12.3	0.0	36.7										
41970.0	42138.0	0.350	338.2	2.9	4.97	0.823	72.5	0.431	0.753	153.3	401.5	0.429	1.078	3.42	1.727	102.2	232.8	10.0	0.583
		7.38	15.21	22.59	TWO	1.016	12.3	0.0	41.5										
41980.0	42138.0	0.318	341.9	7.0	5.43	0.817	75.5	0.410	0.744	156.9	395.3	0.439	1.050	2.42	1.723	100.1	238.0	7.6	0.539
		6.75	13.92	20.67	TWO	1.016	12.3	0.0	46.2										
41990.0	42138.0	C.292	343.7	11.6	6.18	0.811	78.6	0.393	0.736	161.3	389.6	0.447	1.026	1.16	1.718	98.2	242.9	3.9	0.503
		6.25	12.88	19.13	TWO	1.016	12.3	0.0	50.7										
42000.0	42138.0	C.273	342.7	16.8	7.44	0.807	81.9	0.380	0.729	166.3	384.7	0.452	1.007	-0.57	1.715	96.7	247.3	-2.1	0.477
		5.91	12.12	18.04	TWO	1.016	12.3	0.0	55.0										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42010.0	42138.0	0.272	338.0	23.2	9.73	0.803	85.4	0.371	0.724	172.2	380.6	0.456	0.993	-3.31	1.712	95.5	250.9	-12.2	0.466
		5.89	11.80	17.69	TWO	1.016	12.3	0.0	59.4										
42020.0	42138.0	0.314	329.2	31.1	14.68	0.802	89.4	0.365	0.722	179.0	377.5	0.458	0.986	-8.68	1.711	94.7	252.8	-31.0	0.500
		6.66	12.79	19.45	TWO	1.016	12.3	0.0	65.0										
42030.0	42138.0	0.527	320.7	39.9	30.77	0.806	94.1	0.366	0.724	187.1	376.2	0.459	0.989A	-25.18	1.712	94.3	241.5	-67.1	0.788
		11.37	21.23	32.60	TWO	1.016	12.3	0.0	75.3										
42050.0	42138.0	0.437	353.2	-47.7	-20.35	0.842	104.9	0.390	0.755	206.4	373.0	0.461	1.049A	25.11	1.728	93.6	246.2	67.2	0.794
		9.27	21.40	30.67	ONE	1.016	12.3	0.0	76.8										
42060.0	42138.0	0.427	335.8	-35.1	-11.79	0.886	111.7	0.427	0.801	218.4	375.2	0.459	1.142A	16.13	1.750	94.5	252.2	49.1	0.641
		9.03	16.91	25.93	ONE	1.016	12.3	0.0	70.8										
ARRIVAL DATE = 2442140.0																			
41960.0	42140.0	0.407	333.4	-0.5	5.14	0.828	68.1	0.473	0.761	149.9	413.6	0.401	1.121	4.23	1.739	106.6	227.6	10.1	0.701
		8.59	18.66	27.25	TWO	1.044	17.9	0.0	31.2										
41970.0	42140.0	0.368	338.8	3.3	5.32	0.821	71.3	0.446	0.751	152.7	406.6	0.417	1.086	3.31	1.735	103.9	232.6	8.7	0.641
		7.75	16.89	24.64	TWO	1.044	17.9	0.0	35.6										
41980.0	42140.0	0.333	342.8	7.3	5.69	0.815	74.5	0.423	0.742	156.2	400.1	0.429	1.056	2.29	1.730	101.6	237.3	6.6	0.590
		7.04	15.41	22.45	TWO	1.044	17.9	0.0	39.8										
41990.0	42140.0	0.304	345.0	11.7	6.32	0.809	77.7	0.404	0.734	160.4	394.4	0.438	1.031	1.07	1.726	99.7	241.8	3.3	0.549
		6.47	14.21	20.68	TWO	1.044	17.9	0.0	44.0										
42000.0	42140.0	0.282	344.7	16.5	7.36	0.804	81.0	0.389	0.727	165.3	389.3	0.444	1.010	-0.51	1.722	98.1	245.8	-1.7	0.517
		6.06	13.29	19.35	TWO	1.044	17.9	0.0	47.9										
42010.0	42140.0	0.273	341.0	22.0	9.16	0.800	84.6	0.378	0.722	171.0	385.1	0.449	0.995	-2.81	1.719	96.8	249.2	-9.7	0.499
		5.91	12.76	18.67	TWO	1.044	17.9	0.0	51.9										
42020.0	42140.0	0.294	333.4	28.4	12.61	0.799	88.7	0.371	0.719	177.7	381.8	0.452	0.986	-6.75	1.717	95.9	251.3	-23.2	0.509
		6.28	13.06	19.34	TWO	1.044	17.9	0.0	56.7										
42030.0	42140.0	0.396	324.0	36.0	21.09	0.802	93.3	0.370	0.720	185.6	379.9	0.453	0.987A	-15.70	1.718	95.3	248.9	-47.8	0.624
		8.35	16.41	24.76	TWO	1.044	17.9	0.0	65.0										
42060.0	42140.0	0.458	344.3	-40.8	-16.86	0.875	110.9	0.424	0.789	216.2	378.3	0.454	1.123A	20.89	1.753	95.4	246.8	56.6	0.745
		9.75	19.56	29.71	ONE	1.044	17.9	0.0	68.8										
ARRIVAL DATE = 2442142.0																			
41960.0	42142.0	0.432	333.8	-0.4	5.56	0.826	66.4	0.495	0.759	149.6	419.0	0.383	1.134	4.20	1.750	108.7	228.4	9.0	0.775
		9.14	20.84	29.98	TWO	1.071	23.6	0.0	26.2										
41970.0	42142.0	0.389	339.4	3.5	5.65	0.819	69.9	0.464	0.749	152.2	411.7	0.402	1.097	3.23	1.745	105.8	233.0	7.7	0.706
		8.19	18.82	27.02	TWO	1.071	23.6	0.0	30.3										
41980.0	42142.0	0.351	343.8	7.4	5.93	0.812	73.2	0.438	0.740	155.5	405.1	0.416	1.064	2.19	1.740	103.3	237.4	5.7	0.649
		7.40	17.13	24.53	TWO	1.071	23.6	0.0	34.2										
41990.0	42142.0	0.318	346.5	11.7	6.44	0.806	76.5	0.417	0.732	159.5	399.2	0.427	1.037	1.00	1.735	101.3	241.5	2.8	0.601
		6.75	15.75	22.50	TWO	1.071	23.6	0.0	38.0										
42000.0	42142.0	0.293	346.9	16.2	7.30	0.801	80.0	0.400	0.724	164.2	393.9	0.435	1.014	-0.47	1.732	99.5	245.3	-1.4	0.564
		6.26	14.66	20.92	TWO	1.071	23.6	0.0	41.6										
42010.0	42142.0	0.278	344.1	21.1	8.72	0.796	83.7	0.387	0.719	169.8	389.5	0.440	0.997	-2.46	1.728	98.1	248.4	-7.8	0.540
		6.00	13.94	19.94	TWO	1.071	23.6	0.0	45.3										
42020.0	42142.0	0.285	337.6	26.4	11.26	0.795	87.7	0.379	0.715	176.3	386.0	0.444	0.987	-5.54	1.727	97.1	250.6	-18.0	0.536
		6.12	13.84	19.96	TWO	1.071	23.6	0.0	49.5										
42030.0	42142.0	0.341	328.6	32.4	16.56	0.797	92.3	0.377	0.716	183.9	383.7	0.446	0.986A	-11.36	1.727	96.4	250.4	-35.2	0.587
		7.19	15.32	22.51	TWO	1.071	23.6	0.0	55.9										
42040.0	42142.0	0.554	323.1	39.4	32.09	0.806	97.6	0.382	0.723	192.7	383.2	0.447	0.999A	-27.39	1.730	96.4	234.3	-64.3	0.878
		12.03	23.87	35.91	TWO	1.071	23.6	0.0	68.1										
42060.0	42142.0	0.546	358.1	-46.3	-26.12	0.863	109.9	0.423	0.776	213.6	380.9	0.448	1.104A	29.83	1.758	96.2	233.1	66.8	0.946
		11.85	25.88	37.73	ONE	1.071	23.6	0.0	69.9										
ARRIVAL DATE = 2442144.0																			
41960.0	42144.0	0.461	334.1	-0.3	5.99	0.824	64.4	0.520	0.757	149.5	424.6	0.363	1.150	4.22	1.763	111.0	229.6	8.1	0.859
		9.81	23.31	33.11	TWO	1.098	29.5	0.0	21.6										
41970.0	42144.0	0.414	340.1	3.5	5.98	0.816	68.1	0.485	0.747	151.8	417.1	0.384	1.109	3.19	1.758	107.9	234.0	6.8	0.781
		8.74	21.02	29.75	TWO	1.098	29.5	0.0	25.4										
41980.0	42144.0	0.372	344.9	7.4	6.16	0.809	71.6	0.457	0.737	154.8	410.2	0.401	1.074	2.12	1.753	105.2	238.1	5.0	0.716
		7.84	19.09	26.93	TWO	1.098	29.5	0.0	29.1										
41990.0	42144.0	0.336	348.1	11.5	6.56	0.803	75.1	0.433	0.729	158.5	404.0	0.413	1.044	0.95	1.748	102.9	242.0	2.5	0.661
		7.09	17.50	24.60	TWO	1.098	29.5	0.0	32.6										
42000.0	42144.0	0.306	349.2	15.8	7.24	0.797	78.7	0.414	0.721	163.0	398.6	0.423	1.020	-0.43	1.744	101.0	245.5	-1.2	0.618
		6.51	16.24	22.75	TWO	1.098	29.5	0.0	36.0										
42010.0	42144.0	0.286	347.3	20.3	8.37	0.792	82.5	0.399	0.715	168.4	393.9	0.430	1.001	-2.20	1.741	99.5	248.5	-6.5	0.587
		6.14	15.34	21.48	TWO	1.098	29.5	0.0	39.5										
42020.0	42144.0	0.283	342.0	24.9	10.30	0.790	86.6	0.389	0.711	174.7	390.2	0.434	0.988	-4.73	1.739	98.3	250.7	-14.3	0.574
		6.08	14.94	21.02	TWO	1.098	29.5	0.0	43.2										
42030.0	42144.0	0.313	333.6	29.7	13.91	0.791	91.2	0.385	0.711	182.0	387.6	0.437	0.985A	-8.91	1.739	97.6	251.3	-26.7	0.594
		6.64	15.53	22.18	TWO	1.098	29.5	0.0	48.3										
42040.0	42144.0	0.422	325.7	35.3	22.29	0.798	96.5	0.388	0.716	190.5	386.4	0.438	0.994A	-17.84	1.741	97.3	246.8	-47.3	0.719
		8.92	19.21	28.13	TWO	1.098	29.5	0.0	57.4										
ARRIVAL DATE = 2442146.0																			
41960.0	42146.0	0.495	334.4	-0.5	6.43	0.821	62.1	0.549	0.754	149.5	430.6	0.340	1.169	4.28	1.779	113.7	231.2	7.3	0.953
		10.61	26.10	36.71	TWO	1.124	35.4	0.0	17.4										
41970.0	42146.0	0.443	340.8	3.4	6.31	0.813	66.1	0.511	0.744	151.4	422.7	0.364	1.124	3.18	1.774	110.2	235.5	6.1	0.865
		9.39	23.49	32.89	TWO	1.124	35.4	0.0	21.0										
41980.0	42146.0	0.397	346.0	7.3	6.39	0.806	69.8	0.479	0.735	154.1	415.5	0.383	1.086	2.08	1.769	107.2	239.5	4.4	0.791
		8.37	21.31	29.68	TWO	1.124	35.4	0.0	24.4										
41990.0	42146.0	0.357	349.7	11.3	6.66	0.799	73.5	0.452	0.726	157.6	409.0	0.398	1.054	0.91	1.764	104.8	243.1	2.1	0.729
		7.52	19.49	27.01	TWO	1.124	35.4	0.0	27.8										
42000.0	42146.0	0.323	351.5	15.4	7.19	0.793	77.2	0.430	0.718	161.8	403.3	0.409	1.027	-0.41	1.760	102.7	246.4	-1.0	0.679
		6.84	18.02	24.86	TWO	1.124	35.4	0.0	31.0										
42010.0	42146.0	0.297	350.7	19.5	8.08	0.787	81.1	0.414	0.711	166.9	398.4	0.417	1.005	-2.01	1.756	101.0	249.3	-5.4	0.642
		6.35	16.93	23.28	TWO	1.124	35.4	0.0	34.2										
42020.0	42146.0	0.286	346.4	23.7	9.56	0.784	85.3	0.402	0.707	173.0	394.4	0.423	0.991	-4.15	1.754	99.7	251.5	-11.6	0.620
		6.14	16.28	22.42	TWO	1.124	35.4	0.0	37.6										
42030.0	42146.0	0.299	338.9	27.6	12.15	0.784	90.0	0.395	0.706	180.0	391.5	0.427	0.984A	-7.36	1.753	98.8	252.6	-20.9	0.622
		6.38	16.36	22.74	TWO	1.124	35.4	0.0	41.9										
42040.0	42146.0	0.361	330.5	31.7	17.34	0.790	95.3	0.396	0.709	188.2	389.8	0.429	0.990A	-13.15	1.755	98.3	251.2	-35.4	0.681
		7.61	18.08	25.69	TWO	1.124	35.4	0.0	48.6										
42050.0	42146.0	0.555	326.5	37.7	31.12	0.805	101.4	0.407	0.722	197.7	390.0	0.428	1.015A	-27.49	1.762	98.5	236.7	-58.6	0.943
		12.07	25.78	37.85	TWO	1.124	35.4	0.0	61.0										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2442148.0											
41960.0	42148.0	0.535	334.7	-0.7	6.91	0.819	59.3	0.584	0.752	149.8	437.0	0.313	1.191	4.40	1.799	116.7	233.2	6.7	1.061
		11.58	29.28	40.85	TWO	1.149	41.6	0.0	13.4										
41970.0	42148.0	0.477	341.4	3.1	6.66	0.810	63.7	0.541	0.741	151.2	428.6	0.340	1.142	3.21	1.793	112.8	237.4	5.5	0.960
		10.19	26.30	36.49	TWO	1.149	41.6	0.0	16.7										
41980.0	42148.0	0.426	347.1	7.0	6.61	0.802	67.7	0.505	0.731	153.5	421.1	0.362	1.101	2.06	1.788	109.5	241.3	4.0	0.876
		9.02	23.80	32.82	TWO	1.149	41.6	0.0	20.1										
41990.0	42148.0	0.382	351.4	10.9	6.76	0.795	71.6	0.475	0.722	156.7	414.3	0.379	1.065	0.89	1.783	106.8	244.8	1.9	0.805
		8.04	21.72	29.77	TWO	1.149	41.6	0.0	23.3										
42000.0	42148.0	0.343	353.9	14.9	7.14	0.788	75.5	0.450	0.714	160.7	408.3	0.393	1.035	-0.39	1.779	104.5	248.0	-0.9	0.747
		7.24	20.03	27.27	TWO	1.149	41.6	0.0	26.4										
42010.0	42148.0	0.312	354.0	18.8	7.82	0.782	79.5	0.431	0.707	165.5	403.1	0.403	1.011	-1.86	1.775	102.6	250.7	-4.6	0.703
		6.64	18.72	25.35	TWO	1.149	41.6	0.0	29.5										
42020.0	42148.0	0.293	351.0	22.6	8.95	0.777	83.8	0.416	0.702	171.2	398.8	0.410	0.994	-3.72	1.772	101.1	252.9	-9.6	0.673
		6.27	17.84	24.11	TWO	1.149	41.6	0.0	32.7										
42030.0	42148.0	0.294	344.5	26.0	10.86	0.776	88.6	0.408	0.700	177.9	395.5	0.415	0.985	-6.30	1.771	100.1	254.3	-16.8	0.663
		6.29	17.55	23.83	TWO	1.149	41.6	0.0	36.3										
42040.0	42148.0	0.329	336.1	29.0	14.33	0.780	93.9	0.406	0.702	185.7	393.4	0.417	0.987A	-10.41	1.772	99.5	254.1	-27.3	0.689
		6.96	18.30	25.27	TWO	1.149	41.6	0.0	41.5										
42050.0	42148.0	0.435	329.3	33.0	21.89	0.793	100.0	0.413	0.712	194.8	392.8	0.418	1.006A	-18.57	1.778	99.4	249.4	-43.8	0.808
		9.21	21.80	31.00	TWO	1.149	41.6	0.0	50.3										
								ARRIVAL DATE = 2442150.0											
41960.0	42150.0	0.582	334.7	-1.2	7.45	0.816	56.1	0.623	0.750	150.3	443.9	0.282	1.217	4.58	1.821	120.2	235.4	6.1	1.183
		12.74	32.90	45.63	TWO	1.174	47.9	0.0	9.7										
41970.0	42150.0	0.517	341.9	2.7	7.02	0.807	60.8	0.576	0.739	151.3	435.0	0.313	1.164	3.27	1.816	115.8	239.6	5.0	1.068
		11.15	29.50	40.64	TWO	1.174	47.9	0.0	12.7										
41980.0	42150.0	0.461	348.1	6.6	6.84	0.799	65.2	0.535	0.728	153.1	427.0	0.339	1.118	2.06	1.811	112.2	243.5	3.6	0.971
		9.81	26.64	36.44	TWO	1.174	47.9	0.0	15.9										
41990.0	42150.0	0.411	353.0	10.5	6.86	0.790	69.3	0.501	0.719	155.9	419.9	0.358	1.079	0.87	1.806	109.1	246.9	1.7	0.891
		8.68	24.25	32.92	TWO	1.174	47.9	0.0	19.1										
42000.0	42150.0	0.368	356.3	14.3	7.10	0.783	73.4	0.473	0.710	159.5	413.5	0.374	1.046	-0.37	1.801	106.5	250.1	-0.8	0.824
		7.75	22.28	30.03	TWO	1.174	47.9	0.0	22.1										
42010.0	42150.0	0.332	357.4	18.1	7.59	0.776	77.6	0.451	0.702	164.0	408.0	0.386	1.019	-1.75	1.797	104.4	252.8	-4.0	0.771
		7.01	20.73	27.73	TWO	1.174	47.9	0.0	25.1										
42020.0	42150.0	0.305	355.5	21.6	8.44	0.770	82.1	0.434	0.697	169.4	403.3	0.394	0.999	-3.40	1.793	102.8	255.0	-8.1	0.733
		6.50	19.61	26.11	TWO	1.174	47.9	0.0	28.1										
42030.0	42150.0	0.295	350.2	24.7	9.85	0.768	86.9	0.422	0.693	175.7	399.7	0.401	0.986	-5.54	1.792	101.5	256.5	-13.7	0.713
		6.31	19.01	25.32	TWO	1.174	47.9	0.0	31.5										
42040.0	42150.0	0.312	342.2	27.0	12.28	0.770	92.3	0.418	0.694	183.2	397.2	0.404	0.985A	-8.64	1.792	100.7	257.0	-21.6	0.719
		6.63	19.19	25.82	TWO	1.174	47.9	0.0	35.6										
42050.0	42150.0	0.375	334.4	29.3	16.92	0.781	98.4	0.422	0.702	191.9	396.0	0.406	0.999A	-13.93	1.796	100.5	255.3	-33.2	0.777
		7.90	20.89	28.79	TWO	1.174	47.9	0.0	42.0										
42060.0	42150.0	0.539	330.8	34.3	28.07	0.805	105.4	0.440	0.722	201.8	396.4	0.404	1.039A	-25.71	1.807	100.9	245.1	-51.1	0.989
		11.68	27.14	38.82	TWO	1.174	47.9	0.0	53.1										
								ARRIVAL DATE = 2442152.0											
41970.0	42152.0	0.565	342.3	2.1	7.43	0.804	57.4	0.616	0.736	151.6	442.0	0.283	1.189	3.39	1.842	119.3	242.1	4.6	1.192
		12.30	33.15	45.45	TWO	1.197	54.6	0.0	8.8										
41980.0	42152.0	0.501	348.9	6.1	7.08	0.795	62.2	0.570	0.725	153.0	433.5	0.311	1.139	2.09	1.836	115.2	246.0	3.2	1.080
		10.76	29.86	40.62	TWO	1.197	54.6	0.0	11.9										
41990.0	42152.0	0.446	354.4	9.9	6.96	0.786	66.7	0.532	0.715	155.3	425.9	0.334	1.095	0.87	1.831	111.8	249.5	1.5	0.987
		9.46	27.10	36.56	TWO	1.197	54.6	0.0	15.0										
42000.0	42152.0	0.397	358.5	13.7	7.05	0.777	71.1	0.500	0.706	158.5	419.1	0.353	1.058	-0.36	1.826	108.9	252.6	-0.7	0.910
		8.37	24.82	33.19	TWO	1.197	54.6	0.0	18.0										
42010.0	42152.0	0.355	0.6	17.3	7.38	0.769	75.4	0.474	0.697	162.6	413.2	0.367	1.028	-1.67	1.821	106.5	255.3	-3.4	0.848
		7.48	22.99	30.47	TWO	1.197	54.6	0.0	21.0										
42020.0	42152.0	0.322	360.0	20.7	7.99	0.763	80.0	0.454	0.691	167.6	408.2	0.377	1.005	-3.15	1.818	104.6	257.5	-6.9	0.801
		6.82	21.61	28.43	TWO	1.197	54.6	0.0	23.9										
42030.0	42152.0	0.303	356.0	23.5	9.03	0.759	85.0	0.440	0.687	173.6	404.1	0.385	0.989	-4.97	1.815	103.1	259.2	-11.5	0.771
		6.45	20.72	27.17	TWO	1.197	54.6	0.0	27.0										
42040.0	42152.0	0.305	348.8	25.5	10.75	0.760	90.5	0.433	0.687	180.6	401.2	0.390	0.984A	-7.42	1.815	102.1	260.1	-17.5	0.763
		6.50	20.47	26.97	TWO	1.197	54.6	0.0	30.6										
42050.0	42152.0	0.343	340.6	26.7	13.79	0.768	96.7	0.434	0.692	188.9	399.4	0.392	0.992A	-11.14	1.818	101.7	259.6	-25.9	0.789
		7.23	21.24	28.47	TWO	1.197	54.6	0.0	35.4										
42060.0	42152.0	0.439	334.6	29.1	19.96	0.788	103.7	0.447	0.708	198.4	399.1	0.392	1.024A	-17.97	1.827	101.8	256.0	-38.3	0.890
		9.30	24.22	33.52	TWO	1.197	54.6	0.0	43.1										
								ARRIVAL DATE = 2442154.0											
41980.0	42154.0	0.549	349.6	5.4	7.34	0.791	58.7	0.611	0.722	153.2	440.6	0.281	1.163	2.16	1.865	118.7	248.8	2.9	1.205
		11.92	33.56	45.48	TWO	1.220	61.5	0.0	7.9										
41990.0	42154.0	0.487	355.8	9.3	7.07	0.781	63.6	0.568	0.711	154.9	432.5	0.307	1.115	0.87	1.860	114.8	252.4	1.3	1.097
		10.41	30.36	40.78	TWO	1.220	61.5	0.0	10.9										
42000.0	42154.0	0.432	0.6	13.0	7.01	0.772	68.3	0.532	0.701	157.6	425.2	0.328	1.074	-0.36	1.855	111.5	255.5	-0.6	1.008
		9.14	27.71	36.85	TWO	1.220	61.5	0.0	14.0										
42010.0	42154.0	0.384	3.6	16.5	7.17	0.763	72.9	0.502	0.692	161.3	418.8	0.345	1.040	-1.61	1.850	108.8	258.2	-3.0	0.935
		8.09	25.54	33.63	TWO	1.220	61.5	0.0	17.0										
42020.0	42154.0	0.344	4.2	19.8	7.58	0.755	77.7	0.478	0.685	165.8	413.4	0.357	1.013	-2.97	1.846	106.6	260.6	-6.0	0.877
		7.26	23.86	31.12	TWO	1.220	61.5	0.0	19.9										
42030.0	42154.0	0.316	1.7	22.5	8.32	0.749	82.8	0.461	0.680	171.4	408.9	0.367	0.994	-4.55	1.843	104.9	262.4	-9.7	0.837
		6.71	22.67	29.38	TWO	1.220	61.5	0.0	22.9										
42040.0	42154.0	0.306	355.6	24.3	9.53	0.748	88.4	0.450	0.678	178.0	405.4	0.373	0.984	-6.54	1.842	103.7	263.5	-14.5	0.817
		6.52	22.06	28.58	TWO	1.220	61.5	0.0	26.1										
42050.0	42154.0	0.325	347.5	24.9	11.59	0.753	94.7	0.448	0.682	185.8	403.2	0.377	0.987A	-9.31	1.844	103.0	263.8	-20.7	0.823
		6.88	22.24	29.12	TWO	1.220	61.5	0.0	30.0										
42060.0	42154.0	0.386	340.3	25.5	15.33	0.770	101.8	0.456	0.694	194.9	402.3	0.377	1.011A	-13.73	1.851	102.9	262.4	-29.4	0.873
		8.14	23.73	31.87	TWO	1.220	61.5	0.0	35.5										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
									ARRIVAL DATE = 2442456.0										
42310.0	42456.0	0.545	305.8	10.3	21.74	0.778	65.5	0.547	0.722	155.2	317.4	0.327D	1.116	-18.23	2.039	75.2	250.1	-35.2	1.070
		11.82	29.56	41.39	ONE	0.652	262.3	0.0	143.0										
42320.0	42456.0	0.480	315.8	5.4	14.39	0.759	67.1	0.551	0.704	157.9	310.7	0.316D	1.092	-10.30	2.030	72.9	248.9	-19.9	1.018
		10.26	28.00	38.26	ONE	0.652	262.3	0.0	156.1										
42330.0	42456.0	0.450	323.2	3.3	10.93	0.738	68.9	0.557	0.686	160.9	304.0	0.304D	1.068	-6.23	2.021	70.6	250.6	-11.4	1.047
		9.55	28.88	38.43	ONE	0.652	262.3	0.0	163.7										
42340.0	42456.0	0.430	328.9	2.6	9.00	0.715	71.2	0.565	0.668	164.0	297.4	0.291D	1.046	-3.66	2.012	68.3	253.0	-6.2	1.100
		9.10	30.43	39.52	ONE	0.652	262.3	0.0	168.8										
42350.0	42456.0	0.415	333.1	2.4	7.84	0.691	74.0	0.576	0.651	167.4	291.0	0.276D	1.025	-1.80	2.002	66.0	255.4	-2.8	1.159
		8.76	32.19	40.95	ONE	0.652	262.3	0.0	172.5										
42360.0	42456.0	0.403	335.8	2.3	7.12	0.665	77.9	0.588	0.634	171.2	284.8	0.261D	1.007	-0.31	1.992	63.7	257.7	-0.5	1.221
		8.51	34.02	42.53	ONE	0.652	262.3	0.0	175.4										
42370.0	42456.0	0.398	336.5	1.8	6.71	0.640	83.0	0.603	0.620	175.3	279.0	0.246D	0.993	0.96	1.982	61.5	259.9	1.3	1.283
		8.39	35.87	44.26	ONE	0.652	262.3	0.0	177.3										
42380.0	42456.0	0.403	334.9	0.4	6.54	0.621	90.1	0.620	0.609	180.1	273.7	0.232D	0.986A	2.14	1.975	59.3	261.9	2.7	1.346
		8.50	37.72	46.23	ONE	0.652	262.3	0.0	177.3										
42390.0	42456.0	0.429	331.2	-1.9	6.57	0.616	99.8	0.640	0.606	185.6	269.1	0.218D	0.993A	3.30	1.973	57.1	263.7	3.9	1.409
		9.08	39.61	48.69	ONE	0.652	262.3	0.0	175.9										
42400.0	42456.0	0.493	326.0	-4.9	6.81	0.644	112.3	0.667	0.618	192.4	265.8	0.206D	1.030A	4.51	1.981	55.1	265.0	5.0	1.477
		10.56	41.61	52.16	ONE	0.652	262.3	0.0	174.4										
									ARRIVAL DATE = 2442458.0										
42320.0	42458.0	0.495	311.9	12.2	19.42	0.771	69.0	0.521	0.713	157.6	319.1	0.341D	1.084	-14.95	1.992	76.2	255.2	-30.6	0.981
		10.61	26.92	37.53	ONE	0.665	271.2	0.0	145.8										
42330.0	42458.0	0.435	321.0	7.5	12.99	0.752	71.0	0.524	0.696	160.6	312.7	0.331D	1.061	-7.98	1.983	74.1	255.1	-16.1	0.954
		9.21	26.12	35.32	ONE	0.665	271.2	0.0	157.4										
42340.0	42458.0	0.404	327.3	5.4	9.93	0.733	73.4	0.530	0.680	163.9	306.3	0.320D	1.040	-4.35	1.975	72.0	257.2	-8.3	0.988
		8.52	27.12	35.65	ONE	0.665	271.2	0.0	163.7										
42350.0	42458.0	0.383	331.6	4.3	8.22	0.712	76.3	0.537	0.664	167.5	300.0	0.307D	1.020	-2.03	1.966	69.9	259.6	-3.6	1.037
		8.08	28.58	36.66	ONE	0.665	271.2	0.0	167.8										
42360.0	42458.0	0.369	334.0	3.6	7.18	0.692	80.1	0.546	0.649	171.6	294.1	0.295D	1.003	-0.34	1.957	67.8	261.9	-0.6	1.090
		7.76	30.16	37.92	ONE	0.665	271.2	0.0	170.6										
42370.0	42458.0	0.361	334.1	2.4	6.55	0.673	85.1	0.557	0.637	176.1	288.7	0.282D	0.991	1.01	1.949	65.9	264.0	1.6	1.144
		7.60	31.74	39.34	ONE	0.665	271.2	0.0	172.6										
42380.0	42458.0	0.365	331.9	0.5	6.20	0.660	91.8	0.571	0.628	181.3	283.9	0.269D	0.987A	2.19	1.944	64.0	265.9	3.2	1.197
		7.69	33.30	40.99	ONE	0.665	271.2	0.0	173.8										
42390.0	42458.0	0.391	327.4	-2.4	6.05	0.661	100.5	0.588	0.628	187.5	280.0	0.258D	0.997A	3.28	1.944	62.3	267.5	4.5	1.249
		8.25	34.85	43.10	ONE	0.665	271.2	0.0	174.1										
42400.0	42458.0	0.456	321.9	-5.9	6.10	0.693	111.5	0.612	0.644	195.3	277.6	0.250D	1.039A	4.36	1.954	60.7	268.4	5.7	1.303
		9.68	36.44	46.13	ONE	0.665	271.2	0.0	173.6										
42410.0	42458.0	0.580	317.0	-9.1	6.35	0.782	124.2	0.652	0.703	205.4	277.6	0.245D	1.161A	5.49	1.987	59.3	268.5	6.9	1.365
		12.69	38.29	50.97	ONE	0.665	271.2	0.0	172.6										
									ARRIVAL DATE = 2442460.0										
42320.0	42460.0	0.599	304.0	21.1	31.26	0.780	70.6	0.496	0.721	157.3	326.7	0.363D	1.078	-26.44	1.955	79.1	268.9	-50.1	1.114
		13.16	30.86	44.02	ONE	0.684	279.6	0.0	129.1										
42330.0	42460.0	0.439	317.6	13.2	16.44	0.765	72.7	0.496	0.705	160.5	320.8	0.355D	1.055	-11.15	1.947	77.3	259.7	-24.3	0.891
		9.30	24.25	33.55	ONE	0.684	279.6	0.0	148.9										
42340.0	42460.0	0.387	325.2	8.8	11.23	0.748	75.2	0.499	0.690	164.0	314.7	0.346D	1.034	-5.43	1.939	75.3	260.8	-11.5	0.890
		8.15	24.22	32.36	ONE	0.684	279.6	0.0	158.0										
42350.0	42460.0	0.358	329.8	6.4	8.69	0.731	78.3	0.503	0.676	167.9	308.7	0.336D	1.016	-2.37	1.931	73.4	263.1	-4.7	0.926
		7.55	25.31	32.85	ONE	0.684	279.6	0.0	162.8										
42360.0	42460.0	0.340	331.9	4.7	7.25	0.714	82.0	0.509	0.663	172.2	303.1	0.325D	1.000	-0.38	1.924	71.6	265.4	-0.7	0.971
		7.17	26.63	33.80	ONE	0.684	279.6	0.0	165.7										
42370.0	42460.0	0.330	331.5	2.9	6.38	0.700	86.9	0.518	0.652	177.1	298.1	0.315D	0.990	1.09	1.917	69.8	267.5	1.9	1.017
		6.98	27.99	34.96	ONE	0.684	279.6	0.0	167.7										
42380.0	42460.0	0.334	328.5	0.2	5.85	0.693	93.2	0.529	0.646	182.8	293.7	0.305D	0.988A	2.29	1.914	68.3	269.3	3.8	1.062
		7.06	29.30	36.36	ONE	0.684	279.6	0.0	169.0										
42390.0	42460.0	0.362	323.4	-3.3	5.57	0.700	101.2	0.544	0.649	189.7	290.6	0.296D	1.002A	3.34	1.915	66.9	270.6	5.3	1.104
		7.63	30.56	38.19	ONE	0.684	279.6	0.0	169.5										
42400.0	42460.0	0.428	317.8	-7.0	5.47	0.735	111.1	0.566	0.670	198.4	289.1	0.290D	1.049A	4.32	1.928	65.7	271.3	6.6	1.146
		9.06	31.81	40.87	ONE	0.684	279.6	0.0	169.3										
42410.0	42460.0	0.552	313.3	-10.3	5.54	0.822	122.5	0.607	0.736	209.7	290.2	0.289D	1.183A	5.30	1.962	64.8	270.8	7.9	1.194
		11.98	33.23	45.21	ONE	0.684	279.6	0.0	168.2										
									ARRIVAL DATE = 2442462.0										
42310.0	42462.0	0.575	325.5	-56.6	-29.28	0.802	70.4	0.473	0.742	154.4	344.3	0.391D	1.093	34.01	1.927	85.0	281.7	65.3	1.181
		12.58	32.85	45.42	TWO	0.707	287.6	0.0	114.5										
42330.0	42462.0	0.494	311.5	21.1	23.79	0.775	74.2	0.472	0.713	160.5	328.5	0.377D	1.050	-18.23	1.913	80.0	266.7	-40.1	0.914
		10.59	24.94	35.53	ONE	0.707	287.6	0.0	135.6										
42340.0	42462.0	0.381	322.3	13.2	13.77	0.761	76.8	0.472	0.699	164.2	322.8	0.369D	1.029	-7.28	1.905	78.3	263.9	-17.0	0.809
		8.03	21.84	29.87	ONE	0.707	287.6	0.0	151.2										
42350.0	42462.0	0.339	327.6	8.8	9.32	0.746	79.9	0.474	0.686	168.3	317.1	0.361D	1.012	-2.89	1.898	76.5	265.9	-6.5	0.827
		7.16	22.37	29.53	ONE	0.707	287.6	0.0	157.4										
42360.0	42462.0	0.316	329.6	5.9	7.33	0.733	83.6	0.478	0.675	173.0	311.8	0.353D	0.997	-0.44	1.892	74.9	268.2	-0.9	0.864
		6.70	23.46	30.16	ONE	0.707	287.6	0.0	160.7										
42370.0	42462.0	0.305	328.7	3.1	6.19	0.723	88.4	0.484	0.666	178.3	307.1	0.344D	0.989	1.20	1.887	73.4	270.3	2.4	0.903
		6.49	24.61	31.10	ONE	0.707	287.6	0.0	162.6										
42380.0	42462.0	0.310	325.0	-0.4	5.49	0.720	94.3	0.492	0.663	184.5	303.3	0.336D	0.989A	2.44	1.885	72.1	272.0	4.7	0.940
		6.58	25.71	32.29	ONE	0.707	287.6	0.0	163.8										
42390.0	42462.0	0.340	319.5	-4.4	5.08	0.732	101.8	0.506	0.669	192.1	300.8	0.330D	1.007A	3.46	1.888	71.0	273.1	6.3	0.975
		7.17	26.73	33.90	ONE	0.707	287.6	0.0	164.3										
42400.0	42462.0	0.408	314.0	-8.4	4.87	0.770	110.9	0.529	0.694	201.6	300.2	0.327D	1.061A	4.37	1.903	70.1	273.4	7.8	1.008
		8.62	27.71	36.32	ONE	0.707	287.6	0.0	163.9										
42410.0	42462.0	0.532	310.0	-11.5	4.81	0.855	121.3	0.572	0.768	213.9	302.3	0.328D	1.207A	5.23	1.938	69.7	272.4	9.1	1.044
		11.50	28.79	40.28	ONE	0.707	287.6	0.0	162.4										
									ARRIVAL DATE = 2442464.0										
42310.0	42464.0	0.421	325.7	-42.5	-14.52	0.807	71.3	0.458	0.747	154.3	350.9	0.404D	1.089	19.62	1.894	87.1	259.9	52.4	0.802
		8.91	21.63	30.54	TWO	0.734	295.0	0.0	120.0										
42340.0	42464.0	0.401	317.9	19.4	17.16	0.771	78.1	0.449	0.708	164.5	330.5	0.390D	1.025	-11.00	1.874	81.0	267.2	-27.5	0.766
		8.45	20.56	29.01	ONE	0.734	295.0	0.0	141.7										
42350.0	42464.0	0.327	325.1	11.6	10.25	0.759	81.2	0.449	0.696	168.9	325.1	0.383D	1.008	-3.72	1.868	79.4	268.0	-9.3	0.740
		6.92	19.81	26.73	ONE	0.734	295.0	0.0	151.5										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42360.0	42464.0	0.297	327.3	7.0	7.43	0.749	85.0	0.451	0.686	173.8	320.2	0.377D	0.995	-0.52	1.862	77.9	270.3	-1.2	0.767
		6.34	20.61	26.96	ONE	0.734	295.0	0.0	155.2										
42370.0	42464.0	0.284	325.9	3.0	5.96	0.743	89.6	0.455	0.679	179.5	315.9	0.370D	0.988	1.36	1.858	76.6	272.4	3.1	0.800
		6.11	21.59	27.70	ONE	0.734	295.0	0.0	157.2										
42380.0	42464.0	0.290	321.7	-1.2	5.10	0.743	95.3	0.462	0.678	186.3	312.5	0.364D	0.992A	2.65	1.858	75.4	274.0	5.7	0.832
		6.22	22.51	28.73	ONE	0.734	295.0	0.0	158.3										
42390.0	42464.0	0.323	315.9	-5.8	4.58	0.758	102.4	0.475	0.687	194.5	310.6	0.360D	1.013A	3.65	1.863	74.6	274.9	7.6	0.860
		6.84	23.34	30.19	ONE	0.734	295.0	0.0	158.6										
42400.0	42464.0	0.394	310.5	-9.9	4.28	0.798	110.9	0.499	0.716	204.7	310.8	0.359D	1.074A	4.49	1.879	74.1	274.8	9.2	0.886
		8.31	24.11	32.42	ONE	0.734	295.0	0.0	157.9										
42410.0	42464.0	0.518	307.1	-12.8	4.13	0.882	120.5	0.546	0.796	217.8	313.7	0.362D	1.231A	5.25	1.916	74.0	273.2	10.6	0.914
		11.16	24.95	36.10	ONE	0.734	295.0	0.0	155.8										
							ARRIVAL DATE = 2442466.0												
42310.0	42466.0	0.371	323.6	-33.4	-8.53	0.812	72.0	0.446	0.751	154.2	357.6	0.416D	1.085	13.97	1.863	89.3	254.1	44.1	0.647
		7.82	17.07	24.88	TWO	0.763	302.1	0.0	118.7										
42320.0	42466.0	0.393	333.0	-42.4	-14.31	0.801	74.2	0.438	0.738	157.4	351.2	0.415D	1.062	20.05	1.857	87.3	265.2	53.8	0.789
		8.28	21.24	29.52	TWO	0.763	302.1	0.0	118.2										
42340.0	42466.0	0.513	309.6	27.9	27.99	0.780	79.1	0.431	0.714	164.8	337.6	0.407D	1.022	-21.67	1.845	83.3	276.5	-50.6	0.876
		11.05	23.80	34.85	ONE	0.763	302.1	0.0	124.9										
42350.0	42466.0	0.326	322.0	15.5	11.85	0.770	82.3	0.428	0.704	169.5	332.8	0.402D	1.006	-5.23	1.840	81.9	269.3	-14.4	0.669
		6.89	17.72	24.61	ONE	0.763	302.1	0.0	144.5										
42360.0	42466.0	0.282	325.0	8.1	7.57	0.762	86.0	0.429	0.696	174.7	328.1	0.397D	0.994	-0.64	1.835	80.6	271.5	-1.7	0.682
		6.07	18.10	24.17	ONE	0.763	302.1	0.0	149.3										
42370.0	42466.0	0.268	323.3	2.7	5.68	0.758	90.6	0.431	0.691	180.8	324.2	0.393D	0.988A	1.57	1.832	79.4	273.7	4.0	0.710
		5.82	18.92	24.74	ONE	0.763	302.1	0.0	151.3										
42380.0	42466.0	0.275	318.6	-2.5	4.65	0.762	96.1	0.438	0.691	188.0	321.4	0.388D	0.994A	2.94	1.833	78.5	275.2	7.2	0.737
		5.94	19.71	25.65	ONE	0.763	302.1	0.0	152.2										
42390.0	42466.0	0.311	312.6	-7.4	4.04	0.779	102.9	0.451	0.703	196.7	320.0	0.386D	1.019A	3.92	1.839	77.9	276.0	9.3	0.760
		6.60	20.39	27.00	ONE	0.763	302.1	0.0	152.3										
42400.0	42466.0	0.385	307.6	-11.4	3.67	0.821	110.8	0.475	0.736	207.6	320.7	0.386D	1.085A	4.70	1.856	77.6	275.5	11.0	0.781
		8.10	21.00	29.10	ONE	0.763	302.1	0.0	151.3										
42410.0	42466.0	0.508	304.9	-14.1	3.47	0.903	119.8	0.526	0.821	221.2	324.1	0.389D	1.253A	5.36	1.894	77.8	273.1	12.4	0.804
		10.91	21.68	32.59	ONE	0.763	302.1	0.0	148.7										
							ARRIVAL DATE = 2442468.0												
42310.0	42468.0	0.348	322.0	-27.4	-5.27	0.815	72.6	0.436	0.754	154.1	364.1	0.425	1.082	11.06	1.836	91.2	249.9	39.1	0.558
		7.34	14.48	21.83	TWO	0.793	308.9	0.0	113.5										
42320.0	42468.0	0.337	329.7	-31.3	-7.61	0.806	74.9	0.427	0.742	157.4	357.7	0.426D	1.059	13.64	1.831	89.3	258.2	43.8	0.624
		7.12	16.39	23.51	TWO	0.793	308.9	0.0	117.2										
42330.0	42468.0	0.369	339.2	-43.3	-14.46	0.796	77.4	0.419	0.731	161.2	351.8	0.424D	1.037	20.71	1.825	87.6	269.9	55.8	0.779
		7.77	20.96	28.73	TWO	0.793	308.9	0.0	115.9										
42350.0	42468.0	0.349	317.6	21.7	15.41	0.779	83.2	0.412	0.711	170.0	340.1	0.418D	1.004	-8.70	1.814	84.2	270.4	-25.6	0.631
		7.36	16.61	23.98	ONE	0.793	308.9	0.0	134.9										
42360.0	42468.0	0.272	322.7	9.3	7.80	0.773	86.9	0.411	0.704	175.5	335.8	0.415D	0.993	-0.85	1.810	83.0	271.7	-2.5	0.607
		5.88	15.91	21.79	ONE	0.793	308.9	0.0	142.8										
42370.0	42468.0	0.254	321.0	1.9	5.30	0.771	91.4	0.412	0.700	182.0	332.2	0.411D	0.989A	1.89	1.808	82.0	274.0	5.4	0.631
		5.58	16.61	22.19	ONE	0.793	308.9	0.0	144.8										
42380.0	42468.0	0.263	316.0	-4.1	4.11	0.777	96.8	0.418	0.702	189.6	329.7	0.409D	0.996A	3.34	1.810	81.2	275.6	9.2	0.654
		5.73	17.30	23.03	ONE	0.793	308.9	0.0	145.6										
42390.0	42468.0	0.302	310.0	-9.2	3.44	0.796	103.2	0.431	0.716	198.8	328.8	0.407D	1.025A	4.28	1.817	80.7	276.1	11.5	0.674
		6.43	17.87	24.30	ONE	0.793	308.9	0.0	145.5										
42400.0	42468.0	0.377	305.3	-13.0	3.04	0.838	110.8	0.458	0.752	210.1	330.0	0.408D	1.096A	4.98	1.835	80.7	275.1	13.1	0.691
		7.95	18.38	26.32	ONE	0.793	308.9	0.0	144.1										
42410.0	42468.0	0.500	302.1	-15.4	2.80	0.919	119.4	0.512	0.841	223.9	333.6	0.411D	1.272A	5.55	1.873	81.1	272.1	14.6	0.711
		10.73	18.96	29.69	ONE	0.793	308.9	0.0	140.8										
							ARRIVAL DATE = 2442470.0												
42310.0	42470.0	0.336	320.8	-23.1	-3.17	0.818	73.0	0.429	0.756	154.0	370.4	0.432	1.081	9.30	1.812	93.1	245.3	35.7	0.502
		7.10	12.85	19.94	TWO	0.824	315.4	0.0	106.0										
42320.0	42470.0	0.315	327.4	-24.3	-4.20	0.809	75.4	0.418	0.745	157.4	364.0	0.434	1.057	10.51	1.807	91.2	253.5	37.8	0.537
		6.69	13.86	20.55	TWO	0.824	315.4	0.0	111.8										
42330.0	42470.0	0.303	334.0	-29.1	-6.52	0.801	77.9	0.409	0.735	161.3	358.1	0.434D	1.035	12.99	1.801	89.4	261.2	42.9	0.594
		6.45	15.54	21.99	TWO	0.824	315.4	0.0	115.4										
42340.0	42470.0	0.356	344.4	-46.1	-15.49	0.793	80.7	0.402	0.725	165.7	352.7	0.433D	1.017	22.12	1.796	87.9	274.6	59.4	0.785
		7.50	21.14	28.64	TWO	0.824	315.4	0.0	112.7										
42350.0	42470.0	0.533	307.8	32.0	30.91	0.786	83.8	0.399	0.717	170.5	346.8	0.431D	1.002	-24.11	1.792	86.3	282.4	-60.0	0.844
		11.53	22.86	34.39	ONE	0.824	315.4	0.0	114.8										
42360.0	42470.0	0.265	320.6	10.8	8.22	0.782	87.6	0.396	0.710	176.3	343.0	0.429D	0.992	-1.25	1.788	85.2	270.9	-4.1	0.543
		5.78	14.05	19.83	ONE	0.824	315.4	0.0	135.4										
42370.0	42470.0	0.242	319.3	0.5	4.77	0.782	92.0	0.397	0.708	183.0	339.7	0.427D	0.989A	2.37	1.787	84.3	273.4	7.5	0.564
		5.39	14.66	20.05	ONE	0.824	315.4	0.0	137.4										
42380.0	42470.0	0.253	314.0	-6.3	3.42	0.789	97.2	0.403	0.712	191.0	337.6	0.425D	0.999A	3.89	1.789	83.6	274.9	11.9	0.586
		5.57	15.28	20.85	ONE	0.824	315.4	0.0	138.1										
42390.0	42470.0	0.295	308.0	-11.3	2.74	0.809	103.5	0.417	0.727	200.6	337.1	0.424D	1.030A	4.76	1.797	83.3	275.2	14.2	0.603
		6.30	15.79	22.08	ONE	0.824	315.4	0.0	137.8										
42400.0	42470.0	0.372	303.7	-14.7	2.34	0.852	110.8	0.444	0.765	212.2	338.5	0.425D	1.105A	5.36	1.816	83.4	273.9	15.8	0.618
		7.83	16.23	24.06	ONE	0.824	315.4	0.0	136.1										
42410.0	42470.0	0.493	301.9	-16.7	2.10	0.931	118.9	0.501	0.856	226.1	342.2	0.427D	1.285A	5.82	1.854	84.1	270.1	17.1	0.637
		10.57	16.79	27.35	ONE	0.824	315.4	0.0	132.3										
							ARRIVAL DATE = 2442472.0												
42310.0	42472.0	0.330	319.9	-19.8	-1.68	0.820	73.2	0.424	0.758	153.9	376.5	0.437	1.080	8.15	1.791	94.9	240.0	32.8	0.467
		6.98	11.84	18.82	TWO	0.856	321.6	0.0	97.0										
42320.0	42472.0	0.305	325.8	-19.5	-2.10	0.812	75.7	0.412	0.748	157.4	370.2	0.440	1.056	8.68	1.785	93.0	248.6	33.8	0.484
		6.50	12.34	18.83	TWO	0.856	321.6	0.0	104.0										
42330.0	42472.0	0.283	330.9	-20.6	-2.92	0.805	78.3	0.401	0.738	161.3	364.3	0.442	1.034	9.60	1.780	91.2	256.1	35.6	0.510
		6.09	13.08	19.17	TWO	0.856	321.6	0.0	109.7										
42340.0	42472.0	0.269	335.8	-26.1	-5.04	0.798	81.1	0.394	0.729	165.8	358.9	0.442D	1.016	11.82	1.776	89.7	263.0	40.8	0.557
		5.83	14.45	20.28	TWO	0.856	321.6	0.0	113.2										
42350.0	42472.0	0.395	349.8	-53.5	-20.44	0.792	84.4	0.388	0.721	171.0	354.3	0.441D	1.001	27.32	1.772	88.4	284.6	68.2	0.875
		8.33	23.79	32.12	TWO	0.856	321.6	0.0	107.2										
42360.0	42472.0	0.268	318.2	13.9	9.33	0.789	88.1	0.385	0.716	176.9	349.8	0.440D	0.992	-2.35	1.769	87.2	269.1	-8.4	0.493
		5.81	12.60	18.41	ONE	0.856	321.6	0.0	127.0										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42370.0	42472.0	0.232	318.4	-2.1	3.89	0.790	92.4	0.386	0.714	183.9	346.8	0.439D	0.990A	3.19	1.768	86.3	271.7	11.1	0.511
		5.22	13.11	18.33	CNE	0.856	321.6	0.0	129.1										
42380.0	42472.0	0.245	312.8	-9.3	2.50	0.798	97.6	0.391	0.719	192.1	345.0	0.438D	1.001A	4.69	1.770	85.8	273.3	15.8	0.531
		5.43	13.70	19.14	ONE	0.856	321.6	0.0	129.8										
42390.0	42472.0	0.289	306.7	-13.8	1.88	0.819	103.6	0.405	0.736	201.9	344.7	0.437D	1.024A	5.41	1.779	85.6	273.4	17.8	0.547
		6.19	14.15	20.34	ONE	0.856	321.6	0.0	129.3										
42400.0	42472.0	0.367	302.6	-16.6	1.55	0.861	110.7	0.434	0.775	213.7	346.3	0.438D	1.111A	5.87	1.798	85.9	271.5	19.1	0.561
		7.73	14.56	22.28	ONE	0.856	321.6	0.0	127.3										
42410.0	42472.0	0.487	301.3	-18.0	1.35	0.938	118.5	0.492	0.866	227.5	349.9	0.440D	1.293A	6.19	1.836	86.7	267.1	19.9	0.580
		10.41	15.13	25.55	ONE	0.856	321.6	0.0	123.0										
ARRIVAL DATE = 2442474.0																			
42310.0	42474.0	0.328	[illegible]	-17.2	-0.54	0.821	73.3	0.422	0.760	153.7	382.3	0.439	1.080	7.35	1.772	96.6	234.4	30.0	0.450
		6.94	11.35	18.29	TWO	0.887	327.7	0.0	87.1										
42320.0	42474.0	0.301	324.7	-15.9	-0.65	0.814	75.8	0.408	0.749	157.2	376.0	0.444	1.055	7.50	1.767	94.6	243.2	30.4	0.454
		6.42	11.46	17.88	TWO	0.887	327.7	0.0	94.8										
42330.0	42474.0	0.276	328.9	-15.2	-0.84	0.807	78.5	0.396	0.740	161.3	370.2	0.447	1.033	7.73	1.762	92.9	251.0	30.7	0.463
		5.96	11.72	17.68	TWO	0.887	327.7	0.0	101.4										
42340.0	42474.0	0.253	331.7	-15.8	-1.25	0.801	81.4	0.387	0.732	165.9	364.9	0.448	1.015	8.17	1.758	91.4	257.6	31.5	0.477
		5.56	12.14	17.70	TWO	0.887	327.7	0.0	106.8										
42350.0	42474.0	0.236	333.4	-20.3	-2.58	0.796	84.7	0.381	0.725	171.2	360.3	0.449	1.000	9.54	1.754	90.1	263.2	35.1	0.505
		5.28	12.95	18.23	TWO	0.887	327.7	0.0	110.7										
42360.0	42474.0	0.421	308.8	31.3	23.15	0.794	88.4	0.377	0.720	177.3	356.3	0.448D	0.991	-16.15	1.752	89.0	270.8	-51.5	0.623
		8.89	16.37	25.26	ONE	0.887	327.7	0.0	109.9										
42370.0	42474.0	0.221	319.0	-7.8	2.13	0.795	92.7	0.377	0.719	184.5	353.4	0.448D	0.990A	4.90	1.751	88.2	269.0	18.3	0.477
		5.05	12.13	17.18	ONE	0.887	327.7	0.0	119.6										
42380.0	42474.0	0.238	312.6	-13.8	1.13	0.805	97.8	0.383	0.725	192.9	351.8	0.447D	1.002A	5.94	1.754	87.7	270.6	21.5	0.495
		5.32	12.64	17.97	ONE	0.887	327.7	0.0	120.4										
42390.0	42474.0	0.284	306.1	-17.0	0.78	0.826	103.7	0.397	0.742	202.9	351.6	0.447D	1.036A	6.32	1.763	87.6	270.5	22.5	0.507
		6.10	13.00	19.11	ONE	0.887	327.7	0.0	120.0										
42400.0	42474.0	0.362	302.1	-18.8	0.61	0.867	110.5	0.427	0.781	214.7	353.3	0.448D	1.114A	6.53	1.782	88.0	268.2	22.9	0.520
		7.63	13.38	21.01	ONE	0.887	327.7	0.0	117.9										
42410.0	42474.0	0.480	301.0	-19.5	0.52	0.941	118.2	0.485	0.871	228.3	356.7	0.448D	1.294A	6.67	1.819	88.9	263.2	23.0	0.541
		10.26	13.99	24.25	ONE	0.887	327.7	0.0	113.4										
ARRIVAL DATE = 2442476.0																			
42310.0	42476.0	0.330	318.8	-15.0	0.38	0.822	73.1	0.423	0.760	153.5	387.9	0.439	1.082	6.77	1.757	98.2	229.0	27.2	0.449
		6.97	11.32	18.29	TWO	0.918	333.6	0.0	77.1										
42320.0	42476.0	0.301	324.0	-13.1	0.44	0.815	75.8	0.407	0.751	157.1	381.7	0.445	1.056	6.68	1.752	96.2	237.8	27.4	0.441
		6.42	11.09	17.51	TWO	0.918	333.6	0.0	84.8										
42330.0	42476.0	0.274	327.7	-11.4	0.54	0.809	78.5	0.394	0.742	161.1	375.9	0.449	1.034	6.55	1.747	94.5	245.6	26.9	0.438
		5.93	11.02	16.94	TWO	0.918	333.6	0.0	91.8										
42340.0	42476.0	0.250	329.6	-9.9	0.74	0.803	81.5	0.383	0.733	165.8	370.7	0.452	1.015	6.38	1.743	93.0	252.3	25.9	0.439
		5.51	11.03	16.54	TWO	0.918	333.6	0.0	97.9										
42350.0	42476.0	0.230	328.7	-8.2	1.21	0.799	84.8	0.376	0.727	171.3	366.2	0.454	1.000	5.83	1.739	91.7	257.9	23.7	0.439
		5.18	11.04	16.23	TWO	0.918	333.6	0.0	103.1										
42360.0	42476.0	0.223	322.6	-0.9	3.64	0.797	88.5	0.371	0.723	177.5	362.4	0.454	0.991	3.37	1.737	90.7	261.9	13.8	0.428
		5.08	10.71	15.78	TWO	0.918	333.6	0.0	107.8										
42370.0	42476.0	0.221	325.1	-27.2	-3.44	0.800	92.8	0.371	0.722	184.8	359.6	0.454D	0.990A	10.42	1.737	89.9	266.2	38.2	0.508
		5.06	13.02	18.08	ONE	0.918	333.6	0.0	107.6										
42380.0	42476.0	0.235	314.1	-21.5	-1.18	0.809	97.8	0.376	0.728	193.3	358.1	0.454D	1.003A	8.13	1.740	89.5	267.1	30.5	0.485
		5.27	12.35	17.62	ONE	0.918	333.6	0.0	110.1										
42390.0	42476.0	0.281	306.6	-21.3	-0.72	0.830	103.6	0.391	0.746	203.4	358.0	0.454D	1.037A	7.65	1.749	89.4	266.6	28.6	0.487
		6.04	12.42	18.47	ONE	0.918	333.6	0.0	110.1										
42400.0	42476.0	0.358	302.3	-21.4	-0.53	0.871	110.3	0.421	0.785	215.2	359.6	0.454D	1.115A	7.43	1.768	89.9	264.0	27.4	0.497
		7.54	12.71	20.25	ONE	0.918	333.6	0.0	108.0										
42410.0	42476.0	0.474	301.3	-21.1	-0.43	0.942	117.7	0.479	0.872	228.6	362.8	0.454	1.289A	7.30	1.804	90.9	258.7	26.2	0.519
		10.10	13.34	23.44	ONE	0.918	333.6	0.0	103.6										
ARRIVAL DATE = 2442478.0																			
42310.0	42478.0	0.334	318.5	-13.2	1.16	0.822	72.8	0.426	0.760	153.2	393.4	0.436	1.084	6.35	1.744	99.8	224.3	24.3	0.462
		7.06	11.70	18.75	TWO	0.948	339.3	0.0	67.4										
42320.0	42478.0	0.304	323.5	-10.9	1.31	0.816	75.6	0.408	0.751	156.8	387.1	0.444	1.058	6.10	1.739	97.8	232.6	24.4	0.444
		6.47	11.17	17.64	TWO	0.948	339.3	0.0	74.8										
42330.0	42478.0	0.276	327.0	-8.5	1.55	0.810	78.4	0.394	0.742	160.9	381.4	0.450	1.034	5.75	1.735	96.0	240.3	23.6	0.431
		5.96	10.81	16.77	TWO	0.948	339.3	0.0	81.7										
42340.0	42478.0	0.251	328.5	-6.1	1.98	0.804	81.5	0.382	0.735	165.6	376.2	0.454	1.015	5.23	1.731	94.5	247.0	21.8	0.423
		5.53	10.56	16.09	TWO	0.948	339.3	0.0	87.9										
42350.0	42478.0	0.232	327.0	-2.8	2.86	0.800	84.8	0.373	0.728	171.1	371.8	0.456	1.000	4.25	1.727	93.2	252.7	18.0	0.414
		5.22	10.33	15.55	TWO	0.948	339.3	0.0	93.2										
42360.0	42478.0	0.230	320.6	5.0	5.47	0.799	88.5	0.368	0.725	177.5	368.1	0.458	0.991	1.56	1.725	92.2	257.0	6.7	0.403
		5.19	10.01	15.20	TWO	0.948	339.3	0.0	97.6										
42380.0	42478.0	0.250	319.9	-36.4	-6.04	0.812	97.7	0.372	0.731	193.4	363.8	0.459	1.002A	12.89	1.729	91.0	263.1	46.2	0.534
		5.52	13.77	19.29	ONE	0.948	339.3	0.0	99.5										
42390.0	42478.0	0.281	308.4	-27.7	-2.99	0.832	103.4	0.386	0.748	203.5	363.8	0.459	1.036A	9.74	1.738	91.1	262.1	36.6	0.493
		6.05	12.59	18.64	ONE	0.948	339.3	0.0	100.2										
42400.0	42478.0	0.355	303.3	-24.7	-2.02	0.871	110.0	0.416	0.785	215.2	365.3	0.458	1.112A	8.69	1.756	91.6	259.3	32.6	0.492
		7.47	12.58	20.05	ONE	0.948	339.3	0.0	98.4										
42410.0	42478.0	0.466	302.0	-23.1	-1.57	0.939	117.3	0.473	0.868	228.3	368.2	0.458	1.279A	8.13	1.790	92.6	254.0	29.6	0.512
		9.94	13.15	23.09	ONE	0.948	339.3	0.0	94.1										
ARRIVAL DATE = 2442480.0																			
42310.0	42480.0	0.342	318.4	-11.6	1.85	0.822	72.3	0.432	0.760	152.9	398.7	0.432	1.088	6.04	1.734	101.4	220.7	21.5	0.487
		7.21	12.42	19.63	TWO	0.978	345.0	0.0	58.4										
42320.0	42480.0	0.310	323.4	-9.0	2.03	0.816	75.2	0.412	0.751	156.4	392.4	0.442	1.060	5.66	1.730	99.3	228.3	21.5	0.460
		6.58	11.63	18.21	TWO	0.978	345.0	0.0	65.3										
42330.0	42480.0	0.280	326.8	-6.3	2.34	0.810	78.1	0.396	0.742	160.5	386.6	0.449	1.036	5.18	1.725	97.5	235.5	20.6	0.439
		6.04	11.03	17.07	TWO	0.978	345.0	0.0	71.9										
42340.0	42480.0	0.255	328.1	-3.4	2.85	0.805	81.2	0.383	0.735	165.3	381.5	0.454	1.016	4.50	1.721	95.9	242.0	18.5	0.423
		5.59	10.57	16.16	TWO	0.978	345.0	0.0	77.8										
42350.0	42480.0	0.236	326.4	0.3	3.81	0.801	84.6	0.373	0.729	170.8	377.1	0.457	1.001	3.38	1.718	94.6	247.6	14.3	0.409
		5.28	10.18	15.46	TWO	0.978	345.0	0.0	82.9										
42360.0	42480.0	0.233	320.5	6.8	6.01	0.800	88.4	0.367	0.725	177.2	373.5	0.459	0.991	1.03	1.716	93.6	252.0	4.4	0.398
		5.23	9.85	15.09	TWO	0.978	345.0	0.0	87.1										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42370.0	42480.0	0.320	308.8	24.6	15.36	0.803	92.7	0.365	0.725	184.6	371.0	0.460	0.990A	-8.47	1.716	92.9	254.9	-33.7	0.455
		6.78	11.50	18.29	TWO	0.978	345.0	0.0	90.0										
42380.0	42480.0	0.427	344.7	-59.6	-23.05	0.812	97.5	0.369	0.731	193.1	368.8	0.461	1.002A	29.79	1.719	92.4	260.4	78.4	0.871
		9.04	23.68	32.72	ONE	0.978	345.0	0.0	91.1										
42390.0	42480.0	0.294	313.1	-37.6	-6.88	0.833	103.1	0.383	0.748	203.7	369.0	0.461	1.035A	13.47	1.728	92.5	256.9	47.9	0.542
		6.29	14.01	20.30	ONE	0.978	345.0	0.0	91.3										
42400.0	42480.0	0.354	305.3	-29.3	-4.09	0.870	109.6	0.413	0.784	214.7	370.4	0.460	1.107A	10.53	1.746	93.0	254.3	38.7	0.510
		7.46	13.07	20.53	ONE	0.978	345.0	0.0	89.5										
42410.0	42480.0	0.460	303.3	-25.5	-2.97	0.935	116.8	0.468	0.862	227.6	373.1	0.459	1.265A	9.25	1.778	94.2	249.5	33.2	0.521
		9.78	13.42	23.19	ONE	0.978	345.0	0.0	85.4										

ARRIVAL DATE = 2442482.0

42310.0	42482.0	0.352	318.5	-10.3	2.47	0.821	71.6	0.440	0.759	152.5	403.8	0.425	1.093	5.81	1.727	103.0	218.1	19.0	0.523
		7.42	13.46	20.88	TWO	1.007	350.5	0.0	50.4										
42320.0	42482.0	0.318	323.4	-7.5	2.66	0.815	74.6	0.418	0.750	156.0	397.5	0.437	1.064	5.34	1.723	100.8	225.1	18.8	0.487
		6.74	12.43	19.17	TWO	1.007	350.5	0.0	56.7										
42330.0	42482.0	0.287	326.8	-4.6	2.98	0.809	77.7	0.400	0.742	160.0	391.7	0.445	1.039	4.76	1.718	98.9	231.7	17.9	0.459
		6.16	11.61	17.77	TWO	1.007	350.5	0.0	62.6										
42340.0	42482.0	0.260	328.2	-1.5	3.51	0.804	80.8	0.386	0.735	164.8	386.6	0.451	1.018	3.99	1.714	97.3	237.8	15.7	0.436
		5.69	10.95	16.65	TWO	1.007	350.5	0.0	68.1										
42350.0	42482.0	0.241	326.6	2.3	4.43	0.801	84.3	0.375	0.729	170.3	382.1	0.456	1.002	2.84	1.711	96.0	243.1	11.6	0.418
		5.36	10.43	15.79	TWO	1.007	350.5	0.0	72.9										
42360.0	42482.0	0.235	321.2	7.8	6.28	0.800	88.1	0.368	0.725	176.7	378.5	0.459	0.992	0.77	1.709	95.0	247.4	3.3	0.405
		5.28	10.05	15.33	TWO	1.007	350.5	0.0	76.8										
42370.0	42482.0	0.276	311.7	18.5	11.39	0.803	92.3	0.365	0.725	184.1	376.0	0.460	0.990A	-4.54	1.709	94.3	250.2	-18.8	0.419
		5.97	10.45	16.42	TWO	1.007	350.5	0.0	80.2										
42390.0	42482.0	0.362	326.1	-52.4	-15.32	0.831	102.7	0.382	0.746	202.5	373.6	0.461	1.031A	21.75	1.721	93.7	249.3	65.4	0.700
		7.62	18.62	26.24	ONE	1.007	350.5	0.0	85.3										
42400.0	42482.0	0.360	309.0	-35.8	-7.24	0.866	109.1	0.410	0.780	213.9	375.0	0.460	1.100A	13.46	1.737	94.3	249.1	46.5	0.556
		7.59	14.43	22.02	ONE	1.007	350.5	0.0	82.1										
42410.0	42482.0	0.454	305.3	-28.6	-4.82	0.928	116.2	0.462	0.852	226.5	377.5	0.458	1.246A	10.82	1.768	95.5	245.4	37.2	0.546
		9.65	14.14	23.79	ONE	1.007	350.5	0.0	78.0										

ARRIVAL DATE = 2442484.0

42310.0	42484.0	0.365	318.6	-9.2	3.04	0.820	70.7	0.450	0.758	152.1	408.9	0.417	1.100	5.66	1.723	104.7	216.6	16.8	0.568
		7.70	14.78	22.48	TWO	1.035	356.1	0.0	43.3										
42320.0	42484.0	0.329	323.7	-6.3	3.22	0.814	73.9	0.426	0.749	155.5	402.5	0.430	1.069	5.09	1.719	102.4	222.8	16.5	0.525
		6.96	13.52	20.48	TWO	1.035	356.1	0.0	48.9										
42330.0	42484.0	0.296	327.2	-3.2	3.52	0.808	77.0	0.407	0.741	159.5	396.6	0.440	1.042	4.44	1.714	100.4	228.9	15.5	0.490
		6.33	12.49	18.83	TWO	1.035	356.1	0.0	54.3										
42340.0	42484.0	0.268	328.7	0.0	4.03	0.803	80.3	0.391	0.734	164.1	391.4	0.447	1.020	3.62	1.710	98.7	234.4	13.4	0.461
		5.83	11.67	17.49	TWO	1.035	356.1	0.0	59.3										
42350.0	42484.0	0.247	327.4	3.7	4.88	0.800	83.8	0.378	0.728	169.6	387.0	0.452	1.003	2.47	1.707	97.3	239.4	9.6	0.438
		5.46	11.01	16.48	TWO	1.035	356.1	0.0	63.7										
42360.0	42484.0	0.239	322.5	8.5	6.44	0.799	87.6	0.370	0.724	175.9	383.3	0.456	0.992	0.62	1.705	96.2	243.5	2.5	0.422
		5.33	10.55	15.89	TWO	1.035	356.1	0.0	67.4										
42370.0	42484.0	0.263	314.1	15.9	9.93	0.801	91.9	0.367	0.724	183.3	380.7	0.458	0.989A	-3.13	1.705	95.5	246.2	-12.6	0.424
		5.73	10.60	16.33	TWO	1.035	356.1	0.0	70.6										
42380.0	42484.0	0.422	305.5	29.8	22.76	0.810	96.8	0.370	0.729	191.8	379.5	0.459	0.999A	-16.23	1.708	95.2	244.0	-53.4	0.592
		8.92	15.48	24.40	TWO	1.035	356.1	0.0	77.0										
42400.0	42484.0	0.391	316.8	-45.3	-12.73	0.861	108.5	0.407	0.775	212.6	379.0	0.459	1.090A	18.74	1.731	95.5	242.6	57.2	0.658
		8.23	17.41	25.64	ONE	1.035	356.1	0.0	77.5										
42410.0	42484.0	0.452	308.4	-32.9	-7.41	0.919	115.5	0.457	0.841	224.9	381.3	0.456	1.225A	13.15	1.760	96.7	241.6	42.3	0.591
		9.61	15.43	25.04	ONE	1.035	356.1	0.0	72.2										

ARRIVAL DATE = 2442486.0

42310.0	42486.0	0.382	318.8	-8.4	3.59	0.819	69.6	0.464	0.757	151.7	414.0	0.406	1.108	5.56	1.722	106.4	215.9	14.9	0.622
		8.05	16.35	24.40	TWO	1.062	1.6	0.0	37.0										
42320.0	42486.0	0.343	324.0	-5.3	3.73	0.812	72.9	0.437	0.748	154.9	407.4	0.421	1.075	4.92	1.717	104.0	221.6	14.5	0.571
		7.24	14.86	22.10	TWO	1.062	1.6	0.0	42.1										
42330.0	42486.0	0.308	327.8	-2.2	4.00	0.807	76.2	0.415	0.740	158.8	401.5	0.432	1.047	4.20	1.713	101.8	227.1	13.4	0.529
		6.55	13.64	20.20	TWO	1.062	1.6	0.0	47.0										
42340.0	42486.0	0.278	329.5	1.2	4.47	0.802	79.6	0.398	0.732	163.4	396.2	0.441	1.023	3.34	1.709	100.1	232.2	11.4	0.495
		6.00	12.65	18.65	TWO	1.062	1.6	0.0	51.5										
42350.0	42486.0	0.255	328.6	4.8	5.23	0.798	83.1	0.384	0.726	168.7	391.6	0.447	1.005	2.20	1.706	98.6	236.7	8.0	0.468
		5.59	11.87	17.46	TWO	1.062	1.6	0.0	55.5										
42360.0	42486.0	0.243	324.3	9.0	6.55	0.797	87.0	0.374	0.722	175.0	387.9	0.452	0.993	0.53	1.703	97.5	240.5	2.0	0.449
		5.41	11.31	16.72	TWO	1.062	1.6	0.0	58.9										
42370.0	42486.0	0.257	316.6	14.5	9.16	0.799	91.3	0.370	0.722	182.2	385.2	0.455	0.989A	-2.40	1.703	96.7	243.1	-9.2	0.444
		5.63	11.17	16.80	TWO	1.062	1.6	0.0	61.9										
42380.0	42486.0	0.336	307.9	23.5	15.94	0.807	96.2	0.372	0.726	190.6	383.7	0.456	0.997A	-9.51	1.706	96.4	243.2	-33.9	0.502
		7.10	12.86	19.97	TWO	1.062	1.6	0.0	66.7										
42400.0	42486.0	0.508	335.8	-56.1	-24.76	0.855	107.7	0.406	0.768	210.9	382.4	0.456	1.079A	30.55	1.727	96.4	222.2	73.0	0.912
		10.92	24.89	35.81	ONE	1.062	1.6	0.0	77.2										
42410.0	42486.0	0.462	313.6	-39.0	-11.41	0.909	114.8	0.453	0.828	223.1	384.8	0.453	1.202A	16.89	1.754	97.7	237.5	49.4	0.666
		9.84	17.63	27.47	ONE	1.062	1.6	0.0	68.6										

ARRIVAL DATE = 2442488.0

42310.0	42488.0	0.402	319.1	-7.7	4.12	0.817	68.2	0.481	0.755	151.3	419.1	0.392	1.119	5.51	1.723	108.3	216.0	13.3	0.684
		8.48	18.17	26.65	TWO	1.089	7.1	0.0	31.5										
42320.0	42488.0	0.360	324.5	-4.6	4.21	0.810	71.7	0.451	0.746	154.3	412.3	0.409	1.083	4.79	1.719	105.6	221.2	12.8	0.626
		7.58	16.45	24.04	TWO	1.089	7.1	0.0	36.1										
42330.0	42488.0	0.323	328.5	-1.3	4.44	0.804	75.2	0.427	0.738	158.0	406.2	0.423	1.053	4.02	1.714	103.4	226.2	11.7	0.577
		6.83	15.04	21.87	TWO	1.089	7.1	0.0	40.5										
42340.0	42488.0	0.290	330.6	2.1	4.84	0.799	78.7	0.407	0.730	162.5	400.8	0.433	1.028	3.12	1.710	101.5	230.9	9.8	0.537
		6.22	13.88	20.09	TWO	1.089	7.1	0.0	44.6										
42350.0	42488.0	0.264	330.1	5.6	5.51	0.796	82.3	0.392	0.724	167.7	396.1	0.441	1.008	2.00	1.707	99.9	235.0	6.7	0.506
		5.76	12.96	18.72	TWO	1.089	7.1	0.0	48.3										
42360.0	42488.0	0.250	326.4	9.4	6.64	0.794	86.2	0.381	0.720	173.8	392.3	0.446	0.994	0.46	1.704	98.7	238.6	1.6	0.483
		5.51	12.30	17.80	TWO	1.089	7.1	0.0	51.5										
42370.0	42488.0	0.255	319.4	13.8	8.67	0.795	90.6	0.375	0.719	180.9	389.4	0.449	0.988A	-1.97	1.704	97.9	241.1	-7.0	0.473
		5.60	12.00	17.61	TWO	1.089	7.1	0.0	54.3										
42380.0	42488.0	0.304	311.0	19.8	13.07	0.802	95.4	0.376	0.723	189.2	387.7	0.451	0.994A	-6.74	1.706	97.5	241.9	-23.5	0.498
		6.48	12.72	19.20	TWO	1.089	7.1	0.0	58.0										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42390.0	42488.0	0.502	306.5	30.4	27.57	0.818	101.0	0.386	0.734	198.7	387.6	0.451	1.018A	-21.61	1.712	97.6	232.4	-58.6	0.732
		10.78	19.57	30.36	TWO	1.089	7.1	0.0	68.5										
42410.0	42488.0	0.506	323.7	-47.3	-18.50	0.897	113.9	0.448	0.814	220.9	387.8	0.449	1.178A	23.72	1.751	98.5	229.8	59.5	0.808
		10.87	21.81	32.68	ONE	1.089	7.1	0.0	68.1										
ARRIVAL DATE = 2442490.0																			
42310.0	42490.0	0.426	319.4	-7.1	4.66	0.815	66.6	0.501	0.754	151.0	424.3	0.376	1.131	5.52	1.728	110.3	216.6	11.9	0.755
		9.01	20.24	29.24	TWO	1.114	12.7	0.0	26.6										
42320.0	42490.0	0.380	325.1	-4.0	4.68	0.808	70.3	0.468	0.744	153.7	417.3	0.396	1.093	4.72	1.723	107.4	221.5	11.3	0.688
		8.01	18.28	26.28	TWO	1.114	12.7	0.0	30.8										
42330.0	42490.0	0.340	329.4	-0.7	4.84	0.802	73.9	0.441	0.736	157.2	411.0	0.411	1.060	3.89	1.718	105.0	226.1	10.2	0.632
		7.17	16.65	23.82	TWO	1.114	12.7	0.0	34.8										
42340.0	42490.0	0.305	331.9	2.7	5.18	0.797	77.6	0.419	0.728	161.5	405.4	0.423	1.033	2.96	1.714	103.0	230.4	8.5	0.587
		6.48	15.32	21.80	TWO	1.114	12.7	0.0	38.6										
42350.0	42490.0	0.276	331.9	6.2	5.75	0.792	81.3	0.401	0.722	166.6	400.5	0.432	1.011	1.85	1.711	101.3	234.3	5.7	0.550
		5.96	14.26	20.22	TWO	1.114	12.7	0.0	41.9										
42360.0	42490.0	0.257	328.9	9.7	6.70	0.790	85.3	0.389	0.717	172.5	396.5	0.438	0.996	0.41	1.708	100.0	237.6	1.3	0.523
		5.64	13.47	19.11	TWO	1.114	12.7	0.0	44.9										
42370.0	42490.0	0.257	322.6	13.3	8.33	0.791	89.7	0.381	0.715	179.5	393.5	0.443	0.988	-1.67	1.707	99.1	240.0	-5.6	0.509
		5.62	13.05	18.67	TWO	1.114	12.7	0.0	47.6										
42380.0	42490.0	0.288	314.4	17.6	11.47	0.797	94.5	0.381	0.718	187.5	391.5	0.445	0.992A	-5.25	1.709	98.5	241.1	-17.4	0.518
		6.18	13.32	19.50	TWO	1.114	12.7	0.0	50.7										
42390.0	42490.0	0.394	307.9	24.6	19.23	0.811	100.1	0.389	0.728	196.7	390.9	0.445	1.011A	-13.44	1.714	98.5	238.4	-40.0	0.613
		8.31	16.09	24.40	TWO	1.114	12.7	0.0	57.6										
ARRIVAL DATE = 2442492.0																			
42310.0	42492.0	0.454	319.8	-6.8	5.20	0.813	64.7	0.525	0.752	150.7	429.6	0.357	1.146	5.57	1.735	112.6	217.7	10.8	0.834
		9.65	22.57	32.22	TWO	1.139	18.3	0.0	22.1										
42320.0	42492.0	0.404	325.7	-3.6	5.14	0.806	68.7	0.488	0.742	153.2	422.3	0.380	1.104	4.69	1.730	109.4	222.4	10.1	0.758
		8.52	20.34	28.86	TWO	1.139	18.3	0.0	26.0										
42330.0	42492.0	0.360	330.4	-0.2	5.23	0.799	72.5	0.458	0.733	156.4	415.8	0.397	1.069	3.80	1.726	106.8	226.7	9.1	0.695
		7.59	18.49	26.08	TWO	1.139	18.3	0.0	29.7										
42340.0	42492.0	0.322	333.3	3.2	5.49	0.793	76.2	0.433	0.725	160.5	409.9	0.411	1.040	2.84	1.721	104.5	230.8	7.4	0.643
		6.81	16.97	23.78	TWO	1.139	18.3	0.0	33.2										
42350.0	42492.0	0.290	334.0	6.6	5.96	0.789	80.1	0.414	0.719	165.3	404.9	0.421	1.016	1.74	1.718	102.7	234.4	4.8	0.601
		6.21	15.74	21.96	TWO	1.139	18.3	0.0	36.4										
42360.0	42492.0	0.267	331.7	9.9	6.75	0.786	84.2	0.399	0.714	171.1	400.7	0.429	0.999	0.38	1.715	101.3	237.4	1.1	0.570
		5.81	14.83	20.63	TWO	1.139	18.3	0.0	39.2										
42370.0	42492.0	0.260	328.1	13.1	8.07	0.786	88.6	0.390	0.711	177.8	397.4	0.434	0.989	-1.47	1.713	100.3	239.8	-4.5	0.551
		5.69	14.26	19.95	TWO	1.139	18.3	0.0	41.7										
42380.0	42492.0	0.280	318.3	16.3	10.43	0.791	93.5	0.387	0.713	185.6	395.2	0.437	0.989A	-4.33	1.714	99.6	241.1	-13.4	0.550
		6.03	14.25	20.28	TWO	1.139	18.3	0.0	44.5										
42390.0	42492.0	0.348	311.0	20.7	15.37	0.803	99.0	0.393	0.722	194.5	394.3	0.438	1.005A	-9.74	1.719	99.5	240.2	-28.7	0.597
		7.33	15.61	22.94	TWO	1.139	18.3	0.0	49.3										
42400.0	42492.0	0.559	309.5	29.2	30.11	0.827	105.4	0.412	0.742	204.7	395.0	0.436	1.047A	-24.94	1.730	100.0	227.0	-57.2	0.855
		12.17	23.20	35.37	TWO	1.139	18.3	0.0	61.6										
ARRIVAL DATE = 2442494.0																			
42310.0	42494.0	0.487	320.0	-6.6	5.77	0.810	62.4	0.552	0.749	150.7	435.2	0.335	1.163	5.69	1.746	115.1	219.2	9.8	0.923
		10.41	25.20	35.62	TWO	1.163	24.0	0.0	18.0										
42320.0	42494.0	0.432	326.4	-3.3	5.61	0.803	66.7	0.512	0.740	152.7	427.6	0.361	1.118	4.71	1.740	111.6	223.7	9.1	0.837
		9.15	22.67	31.82	TWO	1.163	24.0	0.0	21.7										
42330.0	42494.0	0.384	331.4	0.0	5.61	0.796	70.7	0.478	0.731	155.7	420.7	0.381	1.080	3.74	1.736	108.7	227.9	8.1	0.766
		8.09	20.56	28.65	TWO	1.163	24.0	0.0	25.1										
42340.0	42494.0	0.342	334.8	3.5	5.78	0.790	74.7	0.451	0.722	159.4	414.6	0.397	1.048	2.75	1.731	106.2	231.7	6.5	0.706
		7.22	18.82	26.04	TWO	1.163	24.0	0.0	28.4										
42350.0	42494.0	0.307	336.1	6.8	6.15	0.785	78.7	0.428	0.715	164.0	409.3	0.409	1.022	1.65	1.727	104.2	235.1	4.2	0.659
		6.52	17.42	23.94	TWO	1.163	24.0	0.0	31.4										
42360.0	42494.0	0.280	334.7	10.1	6.80	0.781	82.8	0.412	0.710	169.5	404.9	0.418	1.002	0.35	1.724	102.7	238.0	0.9	0.622
		6.03	16.35	22.38	TWO	1.163	24.0	0.0	34.1										
42370.0	42494.0	0.267	330.0	13.0	7.87	0.780	87.3	0.400	0.707	176.0	401.3	0.424	0.990	-1.32	1.722	101.5	240.3	-3.7	0.598
		5.80	15.64	21.43	TWO	1.163	24.0	0.0	36.5										
42380.0	42494.0	0.276	322.6	15.5	9.69	0.784	92.3	0.395	0.708	183.5	398.9	0.428	0.988A	-3.70	1.723	100.7	241.8	-10.7	0.590
		5.96	15.42	21.38	TWO	1.163	24.0	0.0	39.0										
42390.0	42494.0	0.323	314.9	18.2	13.12	0.794	97.9	0.399	0.715	192.2	397.6	0.430	1.000A	-7.66	1.727	100.5	241.7	-21.7	0.614
		6.83	16.10	22.93	TWO	1.163	24.0	0.0	42.7										
42400.0	42494.0	0.444	310.4	23.5	21.16	0.816	104.1	0.414	0.732	202.0	397.7	0.429	1.035A	-16.22	1.736	100.8	237.3	-40.7	0.730
		9.41	19.51	28.93	TWO	1.163	24.0	0.0	50.7										
ARRIVAL DATE = 2442496.0																			
42310.0	42496.0	0.525	320.2	-6.6	6.39	0.808	59.8	0.585	0.747	150.8	441.2	0.310	1.184	5.87	1.759	117.9	221.0	8.9	1.024
		11.34	28.18	39.52	TWO	1.186	29.8	0.0	14.3										
42320.0	42496.0	0.465	326.9	-3.3	6.09	0.800	64.4	0.540	0.737	152.4	433.1	0.339	1.135	4.77	1.754	114.1	225.4	8.3	0.926
		9.90	25.29	35.20	TWO	1.186	29.8	0.0	17.6										
42330.0	42496.0	0.412	332.4	0.2	5.99	0.793	68.7	0.502	0.728	155.0	425.8	0.362	1.093	3.73	1.749	110.8	229.5	7.2	0.845
		8.70	22.89	31.60	TWO	1.186	29.8	0.0	20.9										
42340.0	42496.0	0.366	336.4	3.6	6.06	0.786	72.9	0.471	0.719	158.4	419.4	0.380	1.058	2.69	1.744	108.1	233.1	5.7	0.777
		7.71	20.91	28.62	TWO	1.186	29.8	0.0	24.0										
42350.0	42496.0	0.326	338.4	7.0	6.33	0.780	77.0	0.446	0.712	162.7	413.8	0.394	1.029	1.58	1.740	105.9	236.4	3.7	0.723
		6.90	19.30	26.21	TWO	1.186	29.8	0.0	26.9										
42360.0	42496.0	0.295	337.8	10.2	6.84	0.776	81.3	0.427	0.706	167.9	409.1	0.405	1.007	0.33	1.736	104.1	239.3	0.8	0.680
		6.30	18.05	24.36	TWO	1.186	29.8	0.0	29.5										
42370.0	42496.0	0.276	334.0	12.9	7.70	0.774	85.9	0.413	0.702	174.1	405.3	0.412	0.992	-1.20	1.734	102.8	241.5	-3.1	0.650
		5.96	17.18	23.13	TWO	1.186	29.8	0.0	31.9										
42380.0	42496.0	0.276	327.3	15.0	9.12	0.776	90.9	0.406	0.702	181.3	402.5	0.417	0.987A	-3.25	1.734	101.9	243.1	-8.7	0.636
		5.96	16.76	22.72	TWO	1.186	29.8	0.0	34.2										
42390.0	42496.0	0.307	319.4	16.7	11.63	0.785	96.5	0.407	0.707	189.7	400.8	0.419	0.995A	-6.34	1.737	101.5	243.5	-16.9	0.646
		6.54	17.04	23.58	TWO	1.186	29.8	0.0	37.2										
42400.0	42496.0	0.389	313.6	19.6	16.69	0.804	102.8	0.419	0.721	199.2	400.5	0.419	1.023A	-11.96	1.745	101.6	241.6	-30.1	0.707
		8.19	18.85	27.04	TWO	1.186	29.8	0.0	42.7										
42410.0	42496.0	0.595	313.5	26.8	30.42	0.839	109.9	0.447	0.752	209.8	401.7	0.416	1.088A	-26.24	1.761	102.6	229.1	-52.5	0.958
		13.06	26.25	39.30	TWO	1.186	29.8	0.0	54.9										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2442498.0											
42310.0	42498.0	0.570	320.2	-6.7	7.07	0.806	56.6	0.622	0.745	151.2	447.5	0.282	1.209	6.15	1.776	121.2	223.0	8.2	1.138
		12.44	31.55	43.99	TWO	1.207	35.8	0.0	10.9										
42320.0	42498.0	0.503	327.4	-3.3	6.61	0.797	61.7	0.572	0.735	152.3	438.9	0.314	1.155	4.89	1.770	116.8	227.4	7.5	1.026
		10.81	28.26	39.07	TWO	1.207	35.8	0.0	13.8										
42330.0	42498.0	0.445	333.4	0.1	6.38	0.789	66.3	0.530	0.725	154.4	431.2	0.340	1.109	3.76	1.765	113.2	231.4	6.5	0.934
		9.44	25.52	34.96	TWO	1.207	35.8	0.0	16.9										
42340.0	42498.0	0.394	337.9	3.6	6.34	0.782	70.7	0.495	0.716	157.5	424.4	0.361	1.070	2.66	1.760	110.2	235.0	5.1	0.857
		8.30	23.25	31.56	TWO	1.207	35.8	0.0	19.9										
42350.0	42498.0	0.350	340.6	7.0	6.50	0.775	75.1	0.467	0.708	161.4	418.5	0.377	1.038	1.54	1.756	107.7	238.3	3.2	0.794
		7.37	21.40	28.78	TWO	1.207	35.8	0.0	22.7										
42360.0	42498.0	0.313	340.9	10.1	6.88	0.770	79.5	0.445	0.701	166.3	413.4	0.390	1.013	0.31	1.752	105.8	241.0	0.7	0.745
		6.65	19.94	26.60	TWO	1.207	35.8	0.0	25.3										
42370.0	42498.0	0.288	338.2	12.8	7.55	0.767	84.2	0.428	0.697	172.2	409.3	0.399	0.995	-1.12	1.749	104.2	243.3	-2.7	0.708
		6.18	18.88	25.06	TWO	1.207	35.8	0.0	27.6										
42380.0	42498.0	0.280	332.3	14.8	8.66	0.768	89.3	0.418	0.696	179.0	406.2	0.405	0.987	-2.92	1.749	103.2	244.9	-7.2	0.687
		6.03	18.27	24.30	TWO	1.207	35.8	0.0	29.9										
42390.0	42498.0	0.299	324.5	15.8	10.53	0.775	95.0	0.416	0.699	187.0	404.1	0.408	0.990A	-5.44	1.751	102.6	245.7	-13.6	0.687
		6.37	18.25	24.62	TWO	1.207	35.8	0.0	32.6										
42400.0	42498.0	0.357	317.8	17.1	13.98	0.791	101.3	0.425	0.711	196.2	403.3	0.409	1.013A	-9.49	1.757	102.6	244.9	-23.1	0.721
		7.51	19.26	26.78	TWO	1.207	35.8	0.0	36.5										
42410.0	42498.0	0.484	314.7	21.1	21.59	0.822	108.4	0.448	0.737	206.4	403.9	0.407	1.067A	-17.68	1.771	103.2	240.3	-38.4	0.844
		10.34	22.88	33.22	TWO	1.207	35.8	0.0	44.5										
								ARRIVAL DATE = 2442500.0											
42320.0	42500.0	0.548	327.8	-3.6	7.18	0.794	58.5	0.610	0.732	152.5	445.2	0.286	1.179	5.09	1.790	120.0	229.7	6.9	1.140
		11.89	31.64	43.53	TWO	1.228	41.9	0.0	10.4										
42330.0	42500.0	0.483	334.2	-0.1	6.79	0.786	63.5	0.563	0.722	154.1	437.0	0.315	1.128	3.83	1.784	116.0	233.7	5.9	1.034
		10.33	28.50	38.83	TWO	1.228	41.9	0.0	13.1										
42340.0	42500.0	0.427	339.4	3.5	6.63	0.777	68.2	0.524	0.712	156.7	429.8	0.339	1.085	2.66	1.779	112.6	237.3	4.6	0.946
		9.03	25.89	34.92	TWO	1.228	41.9	0.0	16.0										
42350.0	42500.0	0.377	342.8	6.9	6.66	0.770	72.8	0.491	0.704	160.2	423.4	0.358	1.050	1.51	1.775	109.8	240.5	2.9	0.874
		7.95	23.75	31.70	TWO	1.228	41.9	0.0	18.8										
42360.0	42500.0	0.336	344.1	10.0	6.91	0.764	77.4	0.466	0.697	164.7	418.0	0.372	1.021	0.30	1.770	107.6	243.3	0.6	0.816
		7.09	22.05	29.14	TWO	1.228	41.9	0.0	21.3										
42370.0	42500.0	0.304	342.4	12.7	7.41	0.760	82.3	0.446	0.691	170.2	413.5	0.383	1.000	-1.05	1.767	105.8	245.5	-2.3	0.773
		6.48	20.77	27.25	TWO	1.228	41.9	0.0	23.7										
42380.0	42500.0	0.288	337.5	14.6	8.27	0.759	87.5	0.433	0.689	176.7	410.0	0.390	0.988	-2.67	1.766	104.5	247.2	-6.1	0.745
		6.18	19.94	26.12	TWO	1.228	41.9	0.0	26.0										
42390.0	42500.0	0.295	330.1	15.4	9.68	0.764	93.2	0.428	0.691	194.3	407.6	0.395	0.987A	-4.79	1.767	103.8	248.2	-11.2	0.735
		6.31	19.67	25.97	TWO	1.228	41.9	0.0	28.4										
42400.0	42500.0	0.336	322.8	15.7	12.13	0.777	99.6	0.433	0.700	193.1	406.3	0.397	1.003A	-7.89	1.772	103.6	248.1	-18.3	0.753
		7.09	20.19	27.28	TWO	1.228	41.9	0.0	31.6										
42410.0	42500.0	0.426	318.1	17.2	16.88	0.805	106.8	0.452	0.722	203.0	406.3	0.395	1.048A	-13.26	1.784	104.0	246.1	-28.9	0.822
		9.01	22.23	31.24	TWO	1.228	41.9	0.0	36.9										
								ARRIVAL DATE = 2442502.0											
42330.0	42502.0	0.528	334.9	-0.4	7.24	0.782	60.2	0.601	0.719	154.0	443.3	0.287	1.151	3.95	1.807	119.2	236.2	5.4	1.149
		11.41	31.88	43.29	TWO	1.248	48.3	0.0	9.6										
42340.0	42502.0	0.465	340.7	3.2	6.93	0.773	65.3	0.557	0.709	156.1	435.6	0.314	1.103	2.69	1.802	115.3	239.9	4.2	1.047
		9.91	28.88	38.78	TWO	1.248	48.3	0.0	12.3										
42350.0	42502.0	0.410	344.9	6.6	6.83	0.765	70.2	0.520	0.700	159.2	428.8	0.336	1.064	1.50	1.797	112.2	243.1	2.6	0.964
		8.66	26.40	35.06	TWO	1.248	48.3	0.0	15.0										
42360.0	42502.0	0.363	347.1	9.8	6.95	0.757	75.1	0.490	0.692	163.2	422.9	0.353	1.031	0.29	1.792	109.6	245.9	0.6	0.896
		7.64	24.41	32.05	TWO	1.248	48.3	0.0	17.6										
42370.0	42502.0	0.325	346.6	12.5	7.29	0.752	80.1	0.467	0.686	168.3	417.9	0.365	1.006	-1.00	1.789	107.6	248.2	-2.0	0.844
		6.88	22.88	29.75	TWO	1.248	48.3	0.0	20.0										
42380.0	42502.0	0.301	342.9	14.5	7.92	0.750	85.4	0.451	0.682	174.4	414.0	0.374	0.990	-2.48	1.787	106.1	250.0	-5.3	0.808
		6.41	21.81	28.22	TWO	1.248	48.3	0.0	22.3										
42390.0	42502.0	0.297	336.2	15.2	8.99	0.752	91.2	0.443	0.683	181.5	411.2	0.380	0.985A	-4.30	1.787	105.1	251.2	-9.4	0.790
		6.34	21.27	27.61	TWO	1.248	48.3	0.0	24.6										
42400.0	42502.0	0.323	328.5	14.9	10.76	0.763	97.7	0.444	0.689	189.9	409.5	0.383	0.996A	-6.78	1.791	104.7	251.5	-14.9	0.795
		6.84	21.42	28.26	TWO	1.248	48.3	0.0	27.3										
42410.0	42502.0	0.390	322.6	14.9	13.92	0.787	105.0	0.458	0.707	199.4	409.0	0.383	1.030A	-10.61	1.801	104.9	250.6	-22.5	0.836
		8.21	22.64	30.86	TWO	1.248	48.3	0.0	31.3										
								ARRIVAL DATE = 2442504.0											
42330.0	42504.0	0.580	335.4	-0.9	7.75	0.778	56.4	0.644	0.716	154.3	450.3	0.255	1.177	4.15	1.833	122.9	238.9	5.0	1.279
		12.70	35.76	48.45	TWO	1.266	55.0	0.0	6.4										
42340.0	42504.0	0.510	341.8	2.7	7.25	0.768	61.9	0.595	0.705	155.8	441.9	0.286	1.125	2.77	1.828	118.5	242.7	3.8	1.162
		10.97	32.28	43.25	TWO	1.266	55.0	0.0	8.6										
42350.0	42504.0	0.449	346.8	6.2	7.01	0.759	67.1	0.554	0.696	158.3	434.5	0.311	1.081	1.51	1.822	114.9	246.0	2.3	1.065
		9.52	29.41	38.93	TWO	1.266	55.0	0.0	11.3										
42360.0	42504.0	0.395	349.9	9.5	6.98	0.751	72.3	0.520	0.687	161.8	428.1	0.330	1.044	0.29	1.817	112.0	248.8	0.5	0.986
		8.33	27.07	35.40	TWO	1.266	55.0	0.0	13.9										
42370.0	42504.0	0.351	350.6	12.3	7.17	0.744	77.5	0.493	0.680	166.4	422.7	0.345	1.015	-0.96	1.813	109.7	251.3	-1.8	0.924
		7.39	25.23	32.63	TWO	1.266	55.0	0.0	16.4										
42380.0	42504.0	0.318	348.2	14.3	7.61	0.740	83.0	0.473	0.676	172.1	418.3	0.356	0.995	-2.33	1.811	107.9	253.2	-4.6	0.879
		6.74	23.89	30.64	TWO	1.266	55.0	0.0	18.7										
42390.0	42504.0	0.304	342.5	15.2	8.39	0.740	89.0	0.461	0.674	178.8	415.0	0.364	0.985	-3.94	1.810	106.6	254.5	-8.1	0.851
		6.47	23.09	29.55	TWO	1.266	55.0	0.0	21.0										
42400.0	42504.0	0.316	334.9	14.7	9.67	0.748	95.6	0.458	0.679	186.7	412.9	0.368	0.990A	-5.99	1.812	106.0	255.1	-12.4	0.845
		6.71	22.91	29.61	TWO	1.266	55.0	0.0	23.5										
42410.0	42504.0	0.365	328.0	13.6	11.85	0.768	102.9	0.467	0.692	195.7	411.9	0.369	1.016A	-8.87	1.820	105.9	254.9	-18.1	0.868
		7.69	23.59	31.28	TWO	1.266	55.0	0.0	26.7										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
ARRIVAL DATE = 2442804.0																			
42660.0	42804.0	0.538	294.0	3.1	18.94	0.762	63.9	0.576	0.713	156.4	314.3	0.302D	1.123	-17.36	2.119	73.6	234.1	-33.7	1.094
		11.65	30.27	41.92	ONE	0.666	243.3	0.0	145.2										
42670.0	42804.0	0.493	302.4	-1.0	13.53	0.741	65.5	0.581	0.695	159.0	307.7	0.291D	1.098	-11.33	2.110	71.2	233.7	-21.5	1.069
		10.57	29.51	40.08	ONE	0.666	243.3	0.0	156.5										
42680.0	42804.0	0.469	309.1	-2.8	10.72	0.718	67.5	0.588	0.676	161.9	300.9	0.278D	1.074	-7.85	2.101	68.8	235.4	-14.0	1.104
		9.98	30.55	40.53	ONE	0.666	243.3	0.0	163.9										
42690.0	42804.0	0.451	314.5	-3.5	9.07	0.693	69.9	0.598	0.658	165.0	294.3	0.265D	1.051	-5.50	2.091	66.4	237.6	-9.1	1.159
		9.58	32.20	41.78	ONE	0.666	243.3	0.0	169.3										
42700.0	42804.0	0.438	318.6	-3.7	8.06	0.666	73.0	0.609	0.640	168.3	287.9	0.250D	1.030	-3.72	2.081	64.0	239.9	-5.7	1.223
		9.27	34.08	43.35	ONE	0.666	243.3	0.0	173.4										
42710.0	42804.0	0.428	321.2	-3.8	7.44	0.637	77.1	0.622	0.623	171.9	281.7	0.236D	1.011	-2.25	2.071	61.6	242.2	-3.2	1.290
		9.04	36.06	45.10	ONE	0.666	243.3	0.0	176.6										
42720.0	42804.0	0.423	321.8	-4.3	7.10	0.611	82.9	0.638	0.608	175.9	275.8	0.221D	0.996	-0.94	2.061	59.2	244.3	-1.2	1.358
		8.95	38.08	47.04	ONE	0.666	243.3	0.0	178.4										
42730.0	42804.0	0.431	320.2	-5.4	7.00	0.590	90.9	0.656	0.598	180.5	270.3	0.206D	0.990A	0.29	2.054	56.9	246.3	0.4	1.427
		9.12	40.13	49.26	ONE	0.666	243.3	0.0	177.0										
42740.0	42804.0	0.461	316.3	-7.4	7.11	0.587	101.8	0.677	0.595	185.8	265.6	0.192D	0.998A	1.54	2.052	54.5	248.0	1.7	1.498
		9.81	42.24	52.05	ONE	0.666	243.3	0.0	175.0										
42750.0	42804.0	0.532	311.0	-10.0	7.46	0.624	115.7	0.705	0.610	192.3	262.1	0.180D	1.040A	2.86	2.062	52.3	249.3	3.0	1.574
		11.50	44.50	56.00	ONE	0.666	243.3	0.0	173.3										
ARRIVAL DATE = 2442806.0																			
42670.0	42806.0	0.504	295.2	6.4	18.91	0.753	67.7	0.550	0.704	158.6	317.0	0.317D	1.090	-16.16	2.071	75.0	241.4	-32.4	1.039
		10.83	28.64	39.47	ONE	0.679	252.4	0.0	145.7										
42680.0	42806.0	0.453	307.1	2.2	13.39	0.733	69.8	0.553	0.687	161.6	310.6	0.307D	1.067	-10.03	2.063	72.8	241.2	-19.8	1.014
		9.63	27.88	37.51	ONE	0.679	253.4	0.0	156.9										
42690.0	42806.0	0.424	312.9	0.1	10.55	0.712	72.4	0.559	0.670	164.8	304.3	0.295D	1.045	-6.54	2.054	70.6	242.9	-12.2	1.046
		8.98	28.83	37.80	ONE	0.679	253.4	0.0	164.0										
42700.0	42806.0	0.405	317.0	-1.0	8.90	0.689	75.6	0.567	0.654	168.4	298.1	0.283D	1.024	-4.20	2.045	68.4	245.0	-7.3	1.095
		8.53	30.30	38.84	ONE	0.679	253.4	0.0	168.9										
42710.0	42806.0	0.390	319.2	-1.8	7.89	0.667	79.8	0.577	0.639	172.3	292.1	0.270D	1.007	-2.44	2.036	66.3	247.2	-4.0	1.151
		8.22	31.95	40.18	ONE	0.679	253.4	0.0	172.7										
42720.0	42806.0	0.383	319.2	-2.9	7.28	0.647	85.3	0.588	0.626	176.7	286.6	0.258D	0.994	-0.99	2.028	64.2	249.2	-1.5	1.209
		8.08	33.66	41.73	ONE	0.679	253.4	0.0	175.6										
42730.0	42806.0	0.389	316.8	-4.7	6.95	0.634	92.7	0.603	0.618	181.8	281.8	0.245D	0.990A	0.30	2.023	62.3	251.1	0.4	1.266
		8.20	35.36	43.56	ONE	0.679	253.4	0.0	177.6										
42740.0	42806.0	0.419	312.2	-7.2	6.84	0.639	102.4	0.621	0.618	187.8	277.8	0.234D	1.003A	1.51	2.023	60.4	252.5	2.0	1.323
		8.86	37.06	45.92	ONE	0.679	253.4	0.0	177.8										
42750.0	42806.0	0.491	306.4	-10.2	6.95	0.679	114.5	0.647	0.638	195.4	275.3	0.225D	1.050A	2.73	2.036	58.7	253.4	3.4	1.383
		10.50	38.83	49.33	ONE	0.679	253.4	0.0	176.6										
ARRIVAL DATE = 2442808.0																			
42680.0	42808.0	0.462	303.8	9.0	17.84	0.747	71.8	0.523	0.696	161.5	319.8	0.332D	1.060	-14.03	2.024	76.4	247.4	-29.6	0.966
		9.83	26.48	36.30	ONE	0.700	262.9	0.0	146.9										
42690.0	42808.0	0.409	310.6	4.6	12.63	0.728	74.5	0.525	0.681	164.9	313.7	0.323D	1.038	-8.23	2.016	74.4	247.7	-17.0	0.949
		8.64	25.98	34.61	ONE	0.700	262.9	0.0	157.3										
42700.0	42808.0	0.379	314.8	2.1	9.96	0.710	77.8	0.530	0.666	168.7	307.8	0.313D	1.019	-4.95	2.008	72.5	249.5	-9.7	0.980
		7.99	26.89	34.88	ONE	0.700	262.9	0.0	163.5										
42710.0	42808.0	0.360	316.7	0.4	8.41	0.692	82.0	0.537	0.653	172.9	302.3	0.303D	1.003	-2.74	2.000	70.6	251.6	-5.0	1.024
		7.59	28.19	35.78	ONE	0.700	262.9	0.0	167.6										
42720.0	42808.0	0.351	316.1	-1.5	7.47	0.678	87.3	0.545	0.643	177.8	297.2	0.292D	0.993	-1.07	1.994	68.8	253.5	-1.8	1.072
		7.39	29.60	36.99	ONE	0.700	262.9	0.0	170.5										
42730.0	42808.0	0.356	312.9	-4.0	6.89	0.672	94.2	0.557	0.637	183.4	292.9	0.283D	0.992A	0.31	1.991	67.1	255.2	0.5	1.119
		7.51	30.99	38.49	ONE	0.700	262.9	0.0	172.3										
42740.0	42808.0	0.388	307.7	-7.2	6.59	0.683	103.1	0.572	0.641	190.2	289.7	0.274D	1.008A	1.53	1.993	65.7	256.4	2.4	1.164
		8.17	32.34	40.51	ONE	0.700	262.9	0.0	173.1										
42750.0	42808.0	0.461	301.8	-10.6	6.50	0.727	113.9	0.597	0.666	198.8	288.2	0.269D	1.064A	2.69	2.008	64.5	256.9	4.0	1.210
		9.81	33.69	43.50	ONE	0.700	262.9	0.0	172.8										
42760.0	42808.0	0.598	297.0	-13.5	6.61	0.831	125.9	0.641	0.745	210.2	289.5	0.268D	1.223A	3.85	2.047	63.5	256.3	5.6	1.261
		13.14	35.22	48.37	ONE	0.700	262.9	0.0	171.3										
ARRIVAL DATE = 2442810.0																			
42680.0	42810.0	0.537	297.6	18.1	27.28	0.758	73.4	0.497	0.705	161.5	328.3	0.355D	1.054	-23.06	1.985	79.6	258.5	-46.9	1.047
		11.63	28.88	40.51	ONE	0.727	271.8	0.0	131.7										
42690.0	42810.0	0.413	307.2	10.6	15.96	0.743	76.2	0.496	0.691	165.1	322.7	0.348D	1.033	-11.22	1.978	77.8	252.4	-25.2	0.883
		8.72	24.03	32.75	ONE	0.727	271.8	0.0	148.6										
42700.0	42810.0	0.364	312.1	6.0	11.40	0.728	79.6	0.498	0.678	169.2	317.2	0.340D	1.015	-6.11	1.971	76.1	253.4	-13.4	0.879
		7.66	23.92	31.58	ONE	0.727	271.8	0.0	157.4										
42710.0	42810.0	0.337	313.9	2.8	9.05	0.714	83.8	0.502	0.666	173.8	312.0	0.332D	1.001	-3.18	1.964	74.4	255.2	-6.6	0.909
		7.12	24.80	31.92	ONE	0.727	271.8	0.0	162.2										
42720.0	42810.0	0.325	312.8	-0.2	7.68	0.704	89.0	0.508	0.658	179.0	307.4	0.324D	0.992	-1.18	1.960	72.9	257.1	-2.3	0.947
		6.88	25.92	32.79	ONE	0.727	271.8	0.0	165.1										
42730.0	42810.0	0.331	308.9	-3.6	6.84	0.703	95.6	0.517	0.655	185.3	303.6	0.316D	0.994A	0.33	1.958	71.5	258.6	0.6	0.985
		6.99	27.04	34.03	ONE	0.727	271.8	0.0	166.8										
42740.0	42810.0	0.365	303.1	-7.4	6.34	0.719	103.8	0.531	0.663	192.8	301.2	0.311D	1.015A	1.59	1.963	70.4	259.5	2.9	1.021
		7.68	28.10	35.78	ONE	0.727	271.8	0.0	167.4										
42750.0	42810.0	0.441	297.3	-11.2	6.08	0.766	113.6	0.556	0.694	202.4	300.7	0.308D	1.079A	2.72	1.979	69.6	259.6	4.8	1.055
		9.34	29.11	38.45	ONE	0.727	271.8	0.0	167.0										
42760.0	42810.0	0.578	293.2	-14.2	6.02	0.868	124.5	0.605	0.783	214.9	303.1	0.309D	1.256A	3.79	2.021	69.2	258.3	6.6	1.093
		12.63	30.23	42.86	ONE	0.727	271.8	0.0	165.1										
ARRIVAL DATE = 2442812.0																			
42660.0	42812.0	0.467	306.6	-51.5	-18.94	0.793	70.4	0.481	0.739	155.3	352.3	0.384D	1.094	22.61	1.961	87.5	251.8	57.8	0.890
		9.96	24.24	34.20	TWO	0.757	280.2	0.0	118.0										
42690.0	42812.0	0.462	302.1	18.6	22.55	0.754	77.7	0.472	0.699	165.4	331.2	0.369D	1.029	-17.49	1.941	80.9	259.2	-40.0	0.896
		9.82	24.40	34.23	ONE	0.757	280.2	0.0	135.7										
42700.0	42812.0	0.362	308.9	10.9	13.61	0.742	81.2	0.471	0.688	169.8	326.1	0.364D	1.011	-8.07	1.935	79.3	256.7	-19.5	0.800
		7.62	21.56	29.18	ONE	0.757	280.2	0.0	149.9										
42710.0	42812.0	0.322	310.9	5.6	9.89	0.732	85.3	0.473	0.678	174.7	321.3	0.358D	0.998	-3.84	1.930	77.8	258.1	-9.0	0.808
		6.82	21.81	28.62	ONE	0.757	280.2	0.0	156.3										
42720.0	42812.0	0.306	305.4	1.3	7.93	0.726	90.4	0.477	0.672	180.4	317.1	0.352D	0.992A	-1.35	1.926	76.5	259.8	-3.0	0.836
		6.51	22.62	29.13	ONE	0.757	280.2	0.0	159.5										
42730.0	42812.0	0.312	304.9	-3.2	6.78	0.730	96.7	0.484	0.672	187.2	314.0	0.346D	0.997A	0.37	1.926	75.4	261.2	0.8	0.866
		6.62	23.51	30.13	ONE	0.757	280.2	0.0	161.0										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42740.0	42812.0	0.348	298.8	-7.8	6.08	0.749	104.4	0.498	0.683	195.5	312.2	0.343D	1.023A	1.69	1.933	74.6	261.9	3.5	0.894
		7.34	24.33	31.67	ONE	0.757	280.2	0.0	161.4										
42750.0	42812.0	0.427	293.4	-11.8	5.67	0.798	113.5	0.524	0.719	206.0	312.6	0.342D	1.095A	2.81	1.951	74.1	261.6	5.7	0.919
		9.03	25.09	34.12	ONE	0.757	280.2	0.0	160.6										
42760.0	42812.0	0.564	290.0	-14.8	5.46	0.899	123.5	0.578	0.817	219.3	315.8	0.345D	1.289A	3.81	1.994	74.1	259.5	7.7	0.947
		12.29	25.91	38.20	ONE	0.757	280.2	0.0	158.0										
ARRIVAL DATE = 2442814.0																			
42660.0	42814.0	0.400	306.4	-42.3	-11.61	0.798	71.2	0.467	0.743	155.2	359.6	0.396D	1.090	15.73	1.925	89.9	243.9	49.1	0.691
		8.43	18.36	26.79	TWO	0.790	288.0	0.0	118.1										
42670.0	42814.0	0.439	314.8	-52.2	-18.73	0.787	73.6	0.459	0.730	158.5	353.5	0.395D	1.065	23.27	1.919	88.0	258.2	59.3	0.881
		9.31	23.96	33.27	TWO	0.790	288.0	0.0	116.3										
42700.0	42814.0	0.386	304.7	17.5	17.63	0.754	82.4	0.449	0.696	170.5	334.5	0.384D	1.009	-11.86	1.901	82.2	260.2	-30.6	0.761
		8.13	20.43	28.56	ONE	0.790	288.0	0.0	139.6										
42710.0	42814.0	0.315	307.7	9.1	11.11	0.747	86.6	0.448	0.688	175.7	330.2	0.380D	0.997	-4.91	1.897	80.9	260.2	-12.8	0.721
		6.68	19.26	25.94	ONE	0.790	288.0	0.0	149.6										
42720.0	42814.0	0.292	306.0	2.8	8.25	0.744	91.6	0.451	0.684	181.9	326.5	0.375D	0.992A	-1.60	1.895	79.7	261.7	-4.1	0.737
		6.25	19.71	25.96	ONE	0.790	288.0	0.0	153.4										
42730.0	42814.0	0.298	301.1	-3.0	6.71	0.751	97.6	0.458	0.686	189.2	323.8	0.372D	1.000A	0.41	1.896	78.8	263.0	1.0	0.760
		6.36	20.39	26.75	ONE	0.790	288.0	0.0	154.9										
42740.0	42814.0	0.337	295.0	-8.3	5.80	0.773	104.9	0.472	0.701	198.1	322.7	0.370D	1.031A	1.84	1.904	78.3	263.4	4.4	0.782
		7.11	21.04	28.15	ONE	0.790	288.0	0.0	155.0										
42750.0	42814.0	0.418	290.0	-12.6	5.24	0.824	113.4	0.500	0.741	209.2	323.8	0.370D	1.111A	2.95	1.924	78.1	262.5	7.0	0.801
		8.83	21.61	30.44	ONE	0.790	288.0	0.0	153.6										
42760.0	42814.0	0.555	287.4	-15.5	4.92	0.923	122.8	0.559	0.847	223.1	327.5	0.374D	1.321A	3.91	1.968	78.5	259.7	9.2	0.823
		12.06	22.24	34.30	ONE	0.790	288.0	0.0	150.3										
ARRIVAL DATE = 2442816.0																			
42660.0	42816.0	0.369	305.5	-36.1	-7.77	0.802	71.9	0.456	0.746	155.2	366.8	0.406	1.087	12.33	1.891	92.1	239.3	43.8	0.583
		7.76	15.21	22.97	TWO	0.823	295.5	0.0	113.7										
42670.0	42816.0	0.365	313.3	-41.7	-10.89	0.792	74.4	0.446	0.734	158.5	360.6	0.407	1.062	15.82	1.886	90.2	248.8	49.7	0.674
		7.69	17.87	25.56	TWO	0.823	295.5	0.0	116.4										
42680.0	42816.0	0.417	321.7	-53.8	-18.99	0.782	77.1	0.438	0.723	162.3	354.9	0.406D	1.040	24.27	1.880	88.4	264.2	61.7	0.878
		8.82	23.87	32.68	TWO	0.823	295.5	0.0	113.9										
42700.0	42816.0	0.494	298.6	25.8	27.69	0.764	83.4	0.430	0.704	171.1	342.3	0.401D	1.007	-21.71	1.870	84.7	269.5	-52.3	0.870
		10.59	23.63	34.23	ONE	0.823	295.5	0.0	123.3										
42710.0	42816.0	0.321	304.4	13.7	13.14	0.759	87.6	0.429	0.697	176.7	338.6	0.398D	0.996	-6.80	1.866	83.6	261.6	-19.6	0.655
		6.81	17.33	24.13	ONE	0.823	295.5	0.0	141.4										
42720.0	42816.0	0.283	302.9	4.5	8.69	0.759	92.5	0.430	0.694	183.3	335.3	0.396D	0.993A	-1.98	1.865	82.6	262.6	-5.6	0.651
		6.09	17.19	23.28	ONE	0.823	295.5	0.0	146.7										
42730.0	42816.0	0.288	297.8	-2.9	6.62	0.768	98.3	0.437	0.699	191.1	333.1	0.393D	1.004A	0.48	1.867	81.9	263.7	1.3	0.668
		6.17	17.69	23.86	ONE	0.823	295.5	0.0	148.2										
42740.0	42816.0	0.329	291.8	-9.0	5.48	0.793	105.3	0.452	0.716	200.5	332.5	0.392D	1.039A	2.04	1.876	81.5	263.9	5.5	0.685
		6.95	18.20	25.15	ONE	0.823	295.5	0.0	148.0										
42750.0	42816.0	0.412	287.3	-13.4	4.79	0.844	113.4	0.482	0.760	212.1	334.0	0.393D	1.126A	3.17	1.898	81.6	262.5	8.5	0.701
		8.70	18.66	27.35	ONE	0.823	295.5	0.0	146.0										
42760.0	42816.0	0.548	285.4	-16.3	4.38	0.941	122.3	0.546	0.872	226.1	338.0	0.396D	1.347A	4.08	1.942	82.3	258.8	11.0	0.719
		11.89	19.20	31.09	ONE	0.823	295.5	0.0	141.9										
ARRIVAL DATE = 2442818.0																			
42660.0	42818.0	0.352	304.8	-31.7	-5.35	0.805	72.4	0.448	0.749	155.1	373.7	0.413	1.084	10.35	1.861	94.2	234.6	40.3	0.516
		7.41	13.25	20.66	TWO	0.858	302.6	0.0	106.6										
42670.0	42818.0	0.334	311.7	-34.6	-6.90	0.796	74.9	0.436	0.738	158.5	367.5	0.416	1.060	12.21	1.855	92.3	243.6	43.7	0.567
		7.05	14.75	21.80	TWO	0.858	302.6	0.0	111.9										
42680.0	42818.0	0.331	318.5	-41.4	-10.15	0.787	77.7	0.427	0.727	162.4	361.7	0.417	1.038	15.76	1.850	90.5	252.5	50.3	0.653
		7.00	17.26	24.26	TWO	0.858	302.6	0.0	114.2										
42690.0	42818.0	0.406	327.0	-56.7	-20.11	0.779	80.9	0.420	0.718	166.9	356.7	0.417D	1.019	26.01	1.845	89.0	270.6	65.2	0.891
		8.61	24.25	32.87	TWO	0.858	302.6	0.0	110.8										
42710.0	42818.0	0.359	300.5	20.5	17.47	0.769	88.3	0.413	0.704	177.6	346.4	0.413D	0.995	-10.99	1.838	86.0	263.0	-33.2	0.638
		7.56	16.80	24.36	ONE	0.858	302.6	0.0	130.2										
42720.0	42818.0	0.280	300.1	6.6	9.37	0.771	93.2	0.414	0.703	184.5	343.6	0.412D	0.994A	-2.60	1.837	85.2	262.5	-8.3	0.578
		6.03	15.07	21.10	ONE	0.858	302.6	0.0	139.2										
42730.0	42818.0	0.280	295.0	-3.0	6.51	0.781	98.9	0.421	0.709	192.7	341.8	0.411D	1.007A	0.57	1.840	84.6	263.4	1.8	0.589
		6.04	15.38	21.42	ONE	0.858	302.6	0.0	140.8										
42740.0	42818.0	0.323	289.3	-9.8	5.09	0.807	105.6	0.436	0.728	202.5	341.6	0.410D	1.046A	2.31	1.850	84.4	263.3	7.1	0.604
		6.83	15.82	22.65	ONE	0.858	302.6	0.0	140.2										
42750.0	42818.0	0.407	285.3	-14.3	4.29	0.859	113.4	0.469	0.775	214.4	343.4	0.411D	1.138A	3.46	1.873	84.7	261.3	10.5	0.618
		8.59	16.23	24.82	ONE	0.858	302.6	0.0	137.7										
42760.0	42818.0	0.542	283.9	-17.1	3.81	0.953	121.9	0.536	0.890	228.5	347.3	0.413D	1.367A	4.32	1.917	85.6	256.7	13.1	0.637
		11.74	16.78	28.51	ONE	0.858	302.6	0.0	132.7										
ARRIVAL DATE = 2442820.0																			
42660.0	42820.0	0.342	304.2	-28.2	-3.64	0.807	72.6	0.443	0.751	155.0	380.3	0.418	1.083	9.08	1.833	96.2	229.1	37.4	0.474
		7.22	12.04	19.26	TWO	0.892	309.3	0.0	97.7										
42670.0	42820.0	0.318	310.4	-29.5	-4.45	0.799	75.3	0.429	0.740	158.5	374.1	0.422	1.058	10.14	1.828	94.2	238.4	39.6	0.503
		6.74	12.88	19.63	TWO	0.892	309.3	0.0	104.6										
42680.0	42820.0	0.299	315.9	-33.0	-5.95	0.791	78.2	0.418	0.731	162.5	368.4	0.425	1.036	11.87	1.823	92.5	246.6	43.2	0.547
		6.39	14.16	20.54	TWO	0.892	309.3	0.0	109.5										
42690.0	42820.0	0.299	321.4	-41.5	-9.38	0.784	81.4	0.410	0.722	167.1	363.2	0.426	1.018	15.53	1.818	90.9	254.9	50.7	0.629
		6.38	16.54	22.92	TWO	0.892	309.3	0.0	111.6										
42700.0	42820.0	0.432	330.9	-61.4	-23.39	0.779	85.0	0.404	0.715	172.5	359.0	0.426D	1.003	29.77	1.815	89.7	280.8	71.1	0.952
		9.14	26.06	35.20	TWO	0.892	309.3	0.0	106.5										
42710.0	42820.0	0.556	295.3	29.6	33.29	0.776	88.9	0.401	0.710	178.3	353.6	0.425D	0.995	-26.69	1.812	88.2	278.6	-65.5	0.894
		12.10	24.36	36.46	ONE	0.892	309.3	0.0	110.9										
42720.0	42820.0	0.285	297.6	9.8	10.62	0.780	93.7	0.402	0.710	185.5	351.4	0.425D	0.995A	-3.80	1.812	87.5	261.2	-13.3	0.522
		6.12	13.43	19.55	ONE	0.892	309.3	0.0	130.6										
42730.0	42820.0	0.275	292.9	-3.2	6.34	0.792	99.3	0.408	0.717	194.0	349.9	0.424D	1.010A	0.72	1.816	87.1	261.9	2.5	0.523
		5.94	13.47	19.41	ONE	0.892	309.3	0.0	132.5										
42740.0	42820.0	0.318	287.4	-10.9	4.61	0.819	105.8	0.425	0.738	204.1	350.0	0.424D	1.051A	2.69	1.827	87.0	261.5	9.2	0.538
		6.73	13.89	20.63	ONE	0.892	309.3	0.0	131.5										
42750.0	42820.0	0.403	283.8	-15.4	3.71	0.870	113.3	0.459	0.786	216.1	351.9	0.425D	1.147A	3.85	1.849	87.5	258.9	13.0	0.553
		8.49	14.33	22.82	ONE	0.892	309.3	0.0	128.4										
42760.0	42820.0	0.535	283.0	-18.0	3.18	0.961	121.5	0.528	0.902	230.0	355.7	0.426D	1.378A	4.66	1.893	88.5	253.5	15.5	0.574
		11.58	14.95	26.54	ONE	0.892	309.3	0.0	122.8										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2442822.0											
42660.0	42822.0	0.338	303.7	-25.3	-2.34	0.809	72.7	0.441	0.752	154.9	386.5	0.421	1.083	8.21	1.808	98.0	223.1	34.5	0.452
		7.13	11.40	18.53	TWO	0.926	315.8	0.0	87.8										
42670.0	42822.0	0.310	309.5	-25.6	-2.75	0.801	75.5	0.425	0.742	158.5	380.4	0.427	1.058	8.81	1.803	96.0	232.8	36.2	0.465
		6.59	11.77	18.36	TWO	0.926	315.8	0.0	95.6										
42680.0	42822.0	0.285	314.2	-27.1	-3.45	0.793	78.5	0.413	0.733	162.6	374.7	0.431	1.035	9.68	1.799	94.3	241.1	38.3	0.486
		6.13	12.40	18.53	TWO	0.926	315.8	0.0	102.0										
42690.0	42822.0	0.267	317.7	-31.2	-4.83	0.787	81.7	0.403	0.725	167.3	369.7	0.433	1.017	11.23	1.794	92.8	248.4	42.0	0.521
		5.80	13.42	19.21	TWO	0.926	315.8	0.0	106.6										
42700.0	42822.0	0.270	320.9	-41.9	-8.48	0.783	85.3	0.396	0.718	172.7	365.3	0.434	1.003	15.04	1.791	91.5	255.6	50.8	0.600
		5.86	15.69	21.55	TWO	0.926	315.8	0.0	108.3										
42710.0	42822.0	0.598	334.0	-67.0	-36.41	0.782	89.4	0.392	0.715	179.1	362.2	0.435	0.995	43.13	1.789	90.6	339.5	79.1	1.245
		13.14	34.75	47.88	TWO	0.926	315.8	0.0	100.0										
42720.0	42822.0	0.312	295.3	16.1	13.81	0.786	94.0	0.392	0.715	186.3	358.6	0.435D	0.996A	-6.93	1.789	89.6	259.2	-25.6	0.499
		6.63	12.78	19.40	ONE	0.926	315.8	0.0	119.8										
42730.0	42822.0	0.269	291.4	-3.8	6.07	0.799	99.5	0.399	0.723	195.0	357.4	0.435D	1.012A	0.97	1.794	89.3	259.2	3.7	0.472
		5.85	11.97	17.82	ONE	0.926	315.8	0.0	123.3										
42740.0	42822.0	0.313	286.1	-12.5	3.96	0.826	105.9	0.416	0.745	205.3	357.6	0.435D	1.055A	3.26	1.805	89.3	258.5	12.1	0.488
		6.64	12.44	19.08	ONE	0.926	315.8	0.0	121.9										
42750.0	42822.0	0.398	282.9	-16.8	3.00	0.877	113.2	0.452	0.793	217.3	359.5	0.435D	1.152A	4.39	1.827	89.8	255.5	16.1	0.505
		8.39	12.94	21.34	ONE	0.926	315.8	0.0	118.4										
42760.0	42822.0	0.529	282.5	-19.1	2.47	0.965	121.1	0.521	0.908	231.0	363.0	0.435	1.381A	5.10	1.870	91.0	249.3	18.2	0.531
		11.42	13.70	25.12	ONE	0.926	315.8	0.0	112.3										
								ARRIVAL DATE = 2442824.0											
42660.0	42824.0	0.337	303.5	-22.9	-1.29	0.809	72.6	0.441	0.753	154.7	392.5	0.421	1.085	7.61	1.787	99.8	217.4	31.4	0.447
		7.13	11.26	18.39	TWO	0.959	322.0	0.0	77.6										
42670.0	42824.0	0.307	309.0	-22.5	-1.47	0.802	75.5	0.423	0.743	158.3	386.4	0.429	1.058	7.90	1.782	97.8	226.9	33.0	0.446
		6.54	11.23	17.77	TWO	0.959	322.0	0.0	85.7										
42680.0	42824.0	0.279	313.1	-22.7	-1.76	0.795	78.6	0.409	0.735	162.5	380.8	0.434	1.035	8.30	1.777	96.0	235.4	34.3	0.452
		6.02	11.42	17.44	TWO	0.959	322.0	0.0	92.8										
42690.0	42824.0	0.255	315.5	-24.2	-2.29	0.790	81.9	0.398	0.727	167.3	375.8	0.438	1.016	8.93	1.773	94.5	242.6	36.1	0.466
		5.60	11.81	17.42	TWO	0.959	322.0	0.0	98.5										
42700.0	42824.0	0.238	315.8	-28.6	-3.42	0.786	85.5	0.390	0.721	172.9	371.5	0.440	1.002	10.16	1.770	93.2	248.6	39.4	0.491
		5.32	12.53	17.85	TWO	0.959	322.0	0.0	102.7										
42710.0	42824.0	0.247	315.6	-41.5	-7.20	0.786	89.6	0.385	0.718	179.3	368.1	0.441	0.995	14.04	1.768	92.2	254.3	49.6	0.563
		5.46	14.63	20.10	TWO	0.959	322.0	0.0	104.2										
42730.0	42824.0	0.264	290.6	-5.0	5.54	0.804	99.6	0.392	0.728	195.6	364.2	0.442	1.013A	1.49	1.774	91.2	255.3	6.1	0.434
		5.75	10.90	16.65	ONE	0.959	322.0	0.0	113.2										
42740.0	42824.0	0.307	285.5	-14.8	2.99	0.831	105.9	0.410	0.749	206.0	364.5	0.442	1.057A	4.14	1.785	91.3	254.5	16.4	0.455
		6.53	11.51	18.04	ONE	0.959	322.0	0.0	111.5										
42750.0	42824.0	0.393	282.5	-18.6	2.09	0.880	112.9	0.446	0.797	217.9	366.3	0.442	1.153A	5.14	1.807	92.0	251.1	19.9	0.476
		8.28	12.09	20.37	ONE	0.959	322.0	0.0	107.9										
42760.0	42824.0	0.521	282.4	-20.3	1.64	0.965	120.7	0.515	0.908	231.3	369.6	0.440	1.376A	5.69	1.849	93.2	244.6	21.2	0.507
		11.23	12.98	24.22	ONE	0.959	322.0	0.0	101.7										
								ARRIVAL DATE = 2442826.0											
42660.0	42826.0	0.341	303.3	-20.9	-0.40	0.810	72.3	0.443	0.753	154.5	398.3	0.419	1.087	7.17	1.768	101.5	212.5	28.2	0.457
		7.19	11.55	18.74	TWO	0.991	328.1	0.0	67.6										
42670.0	42826.0	0.308	308.6	-19.9	-0.45	0.803	75.4	0.424	0.744	158.1	392.2	0.429	1.059	7.26	1.763	99.4	221.5	29.7	0.444
		6.55	11.18	17.73	TWO	0.991	328.1	0.0	75.6										
42680.0	42826.0	0.278	312.4	-19.3	-0.52	0.796	78.5	0.408	0.736	162.3	386.6	0.435	1.036	7.36	1.759	97.6	229.7	30.6	0.438
		6.00	11.02	17.02	TWO	0.991	328.1	0.0	82.8										
42690.0	42826.0	0.252	314.3	-19.3	-0.64	0.792	81.9	0.396	0.728	167.2	381.7	0.440	1.017	7.52	1.755	96.1	236.9	31.4	0.439
		5.54	11.02	16.57	TWO	0.991	328.1	0.0	89.0										
42700.0	42826.0	0.230	313.5	-20.5	-0.87	0.789	85.5	0.387	0.723	172.8	377.4	0.443	1.002	7.78	1.752	94.8	242.8	32.2	0.444
		5.20	11.16	16.36	TWO	0.991	328.1	0.0	94.0										
42710.0	42826.0	0.219	309.6	-23.8	-1.43	0.789	89.6	0.381	0.720	179.4	374.1	0.445	0.995	8.37	1.751	93.9	247.3	34.0	0.455
		5.02	11.49	16.51	TWO	0.991	328.1	0.0	97.6										
42720.0	42826.0	0.231	304.7	-35.3	-4.41	0.794	94.3	0.381	0.722	187.0	371.7	0.447	0.996A	11.39	1.751	93.2	250.7	43.2	0.504
		5.21	12.91	18.12	TWO	0.991	328.1	0.0	99.2										
42730.0	42826.0	0.254	290.8	-9.7	3.87	0.807	99.6	0.388	0.730	195.9	370.5	0.447	1.013A	3.14	1.756	92.9	250.7	13.3	0.416
		5.58	10.39	15.97	ONE	0.991	328.1	0.0	102.3										
42740.0	42826.0	0.301	285.6	-19.0	1.36	0.834	105.7	0.406	0.752	206.2	370.8	0.447	1.057A	5.69	1.767	93.1	249.8	23.2	0.445
		6.42	11.19	17.61	ONE	0.991	328.1	0.0	100.8										
42750.0	42826.0	0.387	282.7	-21.2	0.84	0.881	112.6	0.442	0.798	218.0	372.4	0.446	1.151A	6.24	1.789	93.8	246.2	24.6	0.465
		8.15	11.80	19.95	ONE	0.991	328.1	0.0	97.4										
42760.0	42826.0	0.512	282.7	-21.9	0.62	0.962	120.2	0.509	0.904	231.1	375.4	0.444	1.364A	6.49	1.829	95.2	239.8	24.4	0.499
		11.02	12.77	23.80	ONE	0.991	328.1	0.0	91.6										
								ARRIVAL DATE = 2442828.0											
42660.0	42828.0	0.347	303.3	-19.1	0.38	0.809	71.9	0.448	0.753	154.1	403.8	0.416	1.090	6.86	1.752	103.2	208.6	25.1	0.480
		7.31	12.22	19.53	TWO	1.021	333.9	0.0	58.5										
42670.0	42828.0	0.312	308.5	-17.7	0.41	0.803	75.0	0.427	0.744	157.7	397.7	0.426	1.062	6.79	1.748	101.0	216.9	26.4	0.457
		6.63	11.54	18.17	TWO	1.021	333.9	0.0	66.0										
42680.0	42828.0	0.281	312.2	-16.5	0.46	0.797	78.3	0.410	0.736	162.0	392.1	0.435	1.037	6.70	1.743	99.2	224.6	27.1	0.441
		6.05	11.08	17.13	TWO	1.021	333.9	0.0	72.9										
42690.0	42828.0	0.253	313.7	-15.6	0.55	0.792	81.7	0.396	0.729	166.9	387.2	0.440	1.017	6.58	1.740	97.6	231.5	27.3	0.431
		5.56	10.80	16.36	TWO	1.021	333.9	0.0	79.0										
42700.0	42828.0	0.230	312.4	-15.3	0.70	0.790	85.4	0.386	0.724	172.6	383.0	0.445	1.003	6.39	1.737	96.4	237.3	26.9	0.425
		5.19	10.63	15.82	TWO	1.021	333.9	0.0	84.1										
42710.0	42828.0	0.217	307.7	-15.1	1.01	0.790	89.5	0.379	0.721	179.2	379.7	0.447	0.995	6.05	1.735	95.4	241.7	25.6	0.421
		5.00	10.51	15.50	TWO	1.021	333.9	0.0	88.0										
42720.0	42828.0	0.221	299.7	-13.5	1.94	0.795	94.1	0.379	0.723	186.9	377.4	0.449	0.996A	5.09	1.736	94.7	244.6	21.7	0.414
		5.05	10.32	15.37	TWO	1.021	333.9	0.0	90.6										
42740.0	42828.0	0.299	287.1	-28.3	-2.13	0.834	105.5	0.402	0.752	206.0	376.4	0.449	1.055A	9.09	1.752	94.7	244.7	35.6	0.474
		6.37	12.03	18.41	ONE	1.021	333.9	0.0	90.6										
42750.0	42828.0	0.381	283.5	-25.1	-1.05	0.880	112.2	0.438	0.797	217.6	377.9	0.448	1.145A	7.98	1.773	95.4	241.2	30.9	0.477
		8.03	12.13	20.17	ONE	1.021	333.9	0.0	87.7										
42760.0	42828.0	0.503	283.4	-24.1	-0.71	0.956	119.7	0.503	0.895	230.4	380.5	0.445	1.346A	7.61	1.811	96.8	235.3	28.0	0.508
		10.80	13.03	23.83	ONE	1.021	333.9	0.0	82.4										
								ARRIVAL DATE = 2442830.0											
42660.0	42830.0	0.356	303.4	-17.5	1.09	0.809	71.2	0.456	0.752	153.8	409.1	0.410	1.095	6.65	1.739	104.9	206.0	22.2	0.514
		7.50	13.21	20.71	TWO	1.051	339.7	0.0	50.3										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42670.0	42830.0	0.319	308.6	-15.8	1.15	0.802	74.5	0.432	0.744	157.3	402.9	0.422	1.065	6.45	1.735	102.6	213.4	23.3	0.481
		6.77	12.25	19.02	TWO	1.051	339.7	0.0	57.1										
42680.0	42830.0	0.286	312.2	-14.2	1.27	0.797	77.8	0.413	0.736	161.5	397.4	0.432	1.040	6.21	1.731	100.7	220.5	23.8	0.457
		6.14	11.54	17.69	TWO	1.051	339.7	0.0	63.5										
42690.0	42830.0	0.257	313.7	-12.8	1.46	0.792	81.3	0.398	0.729	166.4	392.5	0.439	1.019	5.91	1.727	99.1	226.9	23.6	0.438
		5.63	11.02	16.65	TWO	1.051	339.7	0.0	69.3										
42700.0	42830.0	0.233	312.3	-11.5	1.78	0.790	85.1	0.386	0.724	172.1	388.3	0.444	1.003	5.49	1.724	97.8	232.4	22.6	0.425
		5.24	10.63	15.87	TWO	1.051	339.7	0.0	74.1										
42710.0	42830.0	0.220	307.4	-10.2	2.38	0.790	89.2	0.379	0.721	178.8	385.0	0.447	0.995	4.79	1.723	96.8	236.8	20.2	0.414
		5.04	10.32	15.36	TWO	1.051	339.7	0.0	77.9										
42720.0	42830.0	0.226	295.4	-7.1	3.76	0.795	93.9	0.378	0.723	186.4	382.7	0.450	0.996A	3.32	1.724	96.2	239.7	14.2	0.403
		5.13	10.01	15.14	TWO	1.051	339.7	0.0	80.3										
42730.0	42830.0	0.285	290.4	6.2	9.67	0.808	99.1	0.384	0.731	195.3	381.6	0.450	1.011A	-2.69	1.728	95.9	240.8	-11.5	0.404
		6.13	10.04	16.16	TWO	1.051	339.7	0.0	81.3										
42740.0	42830.0	0.376	298.0	-55.3	-15.09	0.833	105.0	0.400	0.751	205.4	381.4	0.450	1.051A	21.98	1.739	96.1	236.2	66.2	0.707
		7.93	18.85	26.77	ONE	1.051	339.7	0.0	84.6										
42750.0	42830.0	0.381	285.4	-32.0	-4.33	0.876	111.8	0.434	0.793	216.9	382.8	0.448	1.137A	11.13	1.759	96.9	236.3	40.2	0.522
		8.02	13.43	21.45	ONE	1.051	339.7	0.0	79.8										
42760.0	42830.0	0.494	284.6	-27.1	-2.57	0.949	119.1	0.497	0.884	229.3	385.1	0.445	1.323A	9.26	1.795	98.3	231.4	32.4	0.534
		10.59	13.77	24.36	ONE	1.051	339.7	0.0	74.6										
ARRIVAL DATE = 2442832.0																			
42660.0	42832.0	0.369	303.6	-16.2	1.75	0.808	70.3	0.466	0.751	153.4	414.3	0.401	1.101	6.51	1.729	106.6	204.4	19.7	0.558
		7.76	14.48	22.24	TWO	1.080	345.3	0.0	43.0										
42670.0	42832.0	0.329	308.9	-14.2	1.82	0.801	73.8	0.440	0.743	156.8	408.1	0.416	1.070	6.20	1.725	104.2	211.1	20.5	0.516
		6.97	13.27	20.24	TWO	1.080	345.3	0.0	49.2										
42680.0	42832.0	0.294	312.6	-12.3	1.96	0.796	77.2	0.419	0.735	161.0	402.4	0.427	1.043	5.85	1.721	102.2	217.5	20.7	0.484
		6.29	12.33	18.62	TWO	1.080	345.3	0.0	55.0										
42690.0	42832.0	0.263	314.1	-10.5	2.20	0.791	80.8	0.402	0.728	165.8	397.5	0.435	1.021	5.42	1.717	100.5	223.4	20.4	0.459
		5.74	11.60	17.34	TWO	1.080	345.3	0.0	60.3										
42700.0	42832.0	0.239	312.8	-8.8	2.59	0.789	84.7	0.389	0.723	171.5	393.3	0.442	1.004	4.86	1.714	99.2	228.5	19.0	0.439
		5.33	11.04	16.37	TWO	1.080	345.3	0.0	64.8										
42710.0	42832.0	0.225	308.1	-6.9	3.27	0.789	88.8	0.381	0.720	178.1	389.9	0.446	0.995	4.01	1.713	98.1	232.7	16.2	0.424
		5.11	10.60	15.71	TWO	1.080	345.3	0.0	68.3										
42720.0	42832.0	0.230	300.3	-4.0	4.63	0.794	93.5	0.379	0.722	185.7	387.6	0.448	0.995A	2.49	1.713	97.5	235.5	10.3	0.412
		5.19	10.27	15.45	TWO	1.080	345.3	0.0	70.5										
42730.0	42832.0	0.273	291.8	3.6	8.39	0.806	98.7	0.384	0.729	194.5	386.4	0.449	1.009A	-1.42	1.718	97.2	236.7	-5.9	0.411
		5.91	10.24	16.15	TWO	1.080	345.3	0.0	71.5										
42750.0	42832.0	0.410	291.4	-45.8	-11.63	0.871	111.2	0.431	0.787	215.7	387.1	0.447	1.126A	18.29	1.747	98.1	229.2	56.2	0.653
		8.66	17.26	25.91	ONE	1.080	345.3	0.0	75.8										
42760.0	42832.0	0.488	286.7	-31.8	-5.40	0.939	118.5	0.490	0.870	227.9	389.3	0.443	1.297A	11.91	1.781	99.5	227.9	38.6	0.581
		10.45	15.15	25.60	ONE	1.080	345.3	0.0	68.9										
ARRIVAL DATE = 2442834.0																			
42660.0	42834.0	0.384	303.9	-15.0	2.38	0.806	69.2	0.479	0.750	153.0	419.5	0.391	1.109	6.44	1.722	108.4	203.7	17.5	0.610
		8.10	16.00	24.10	TWO	1.107	350.9	0.0	36.7										
42670.0	42834.0	0.342	305.3	-12.9	2.44	0.800	72.9	0.450	0.742	156.3	413.0	0.408	1.076	6.03	1.718	105.8	209.8	18.1	0.561
		7.22	14.55	21.78	TWO	1.107	350.9	0.0	42.3										
42680.0	42834.0	0.305	313.1	-10.8	2.58	0.794	76.5	0.427	0.734	160.3	407.3	0.420	1.047	5.58	1.714	103.7	215.6	18.1	0.521
		6.49	13.40	19.89	TWO	1.107	350.9	0.0	47.5										
42690.0	42834.0	0.272	314.8	-8.6	2.83	0.790	80.1	0.408	0.727	165.1	402.3	0.430	1.024	5.06	1.710	101.9	221.0	17.6	0.489
		5.89	12.48	18.37	TWO	1.107	350.9	0.0	52.3										
42700.0	42834.0	0.246	313.8	-6.6	3.23	0.787	84.0	0.394	0.722	170.7	398.0	0.437	1.006	4.40	1.707	100.5	225.7	16.1	0.464
		5.45	11.77	17.21	TWO	1.107	350.9	0.0	56.4										
42710.0	42834.0	0.230	309.4	-4.6	3.91	0.787	88.2	0.385	0.719	177.2	394.6	0.442	0.995	3.48	1.705	99.4	229.5	13.3	0.446
		5.20	11.22	16.42	TWO	1.107	350.9	0.0	59.6										
42720.0	42834.0	0.233	301.9	-2.0	5.16	0.792	92.9	0.381	0.720	184.7	392.2	0.445	0.994A	2.01	1.706	98.7	232.3	7.9	0.433
		5.24	10.85	16.09	TWO	1.107	350.9	0.0	61.7										
42730.0	42834.0	0.268	293.7	2.8	7.93	0.803	98.1	0.385	0.727	193.4	390.9	0.447	1.006A	-0.98	1.710	98.4	233.5	-3.8	0.431
		5.82	10.81	16.63	TWO	1.107	350.9	0.0	62.7										
42740.0	42834.0	0.402	285.1	16.6	18.22	0.825	104.0	0.400	0.744	203.3	390.9	0.446	1.041A	-11.47	1.719	98.7	230.8	-39.4	0.533
		8.48	13.74	22.23	TWO	1.107	350.9	0.0	67.2										
42760.0	42834.0	0.496	290.8	-39.7	-10.42	0.928	117.7	0.484	0.855	226.2	392.9	0.441	1.268A	16.74	1.769	100.6	223.6	48.2	0.672
		10.64	17.81	28.45	ONE	1.107	350.9	0.0	66.1										
ARRIVAL DATE = 2442836.0																			
42660.0	42836.0	0.404	304.2	-14.0	3.00	0.805	67.9	0.495	0.749	152.6	424.6	0.378	1.119	6.44	1.718	110.2	203.8	15.6	0.670
		8.52	17.76	26.27	TWO	1.133	356.4	0.0	31.2										
42670.0	42836.0	0.359	309.8	-11.8	3.03	0.798	71.7	0.463	0.740	155.7	418.0	0.397	1.083	5.93	1.714	107.5	209.4	16.0	0.613
		7.55	16.07	23.62	TWO	1.133	356.4	0.0	36.2										
42680.0	42836.0	0.318	313.9	-9.5	3.14	0.792	75.5	0.437	0.732	159.5	412.1	0.412	1.052	5.39	1.709	105.2	214.7	15.9	0.566
		6.75	14.71	21.45	TWO	1.133	356.4	0.0	40.9										
42690.0	42836.0	0.283	315.8	-7.2	3.37	0.788	79.3	0.417	0.725	164.2	406.9	0.423	1.027	4.78	1.705	103.3	219.5	15.2	0.528
		6.09	13.61	19.70	TWO	1.133	356.4	0.0	45.2										
42700.0	42836.0	0.255	315.2	-4.9	3.76	0.785	83.2	0.401	0.720	169.7	402.5	0.431	1.008	4.06	1.702	101.8	223.9	13.7	0.499
		5.60	12.75	18.35	TWO	1.133	356.4	0.0	48.9										
42710.0	42836.0	0.237	311.2	-2.8	4.40	0.785	87.5	0.390	0.717	176.1	399.0	0.437	0.996	3.11	1.701	100.7	227.5	11.0	0.476
		5.30	12.10	17.41	TWO	1.133	356.4	0.0	51.9										
42720.0	42836.0	0.237	304.2	-0.6	5.51	0.788	92.2	0.385	0.717	183.5	396.5	0.441	0.993A	1.70	1.701	99.9	230.1	6.2	0.461
		5.30	11.68	16.97	TWO	1.133	356.4	0.0	53.9										
42730.0	42836.0	0.265	296.0	2.7	7.69	0.799	97.4	0.387	0.723	192.0	395.0	0.443	1.003A	-0.75	1.704	99.6	231.4	-2.8	0.458
		5.76	11.59	17.35	TWO	1.133	356.4	0.0	55.1										
42740.0	42836.0	0.348	290.2	10.1	13.36	0.819	103.3	0.401	0.738	201.7	394.8	0.443	1.034A	-6.69	1.713	99.8	230.5	-23.2	0.499
		7.34	12.76	20.10	TWO	1.133	356.4	0.0	57.4										
42760.0	42836.0	0.569	303.2	-53.0	-21.76	0.916	116.8	0.478	0.838	224.1	396.0	0.438	1.238A	27.90	1.759	101.4	210.1	64.0	0.898
		12.41	24.46	36.87	ONE	1.133	356.4	0.0	68.6										
ARRIVAL DATE = 2442838.0																			
42660.0	42838.0	0.427	304.6	-13.2	3.62	0.803	66.3	0.514	0.747	152.2	429.7	0.363	1.131	6.49	1.717	112.2	204.4	14.1	0.738
		9.03	19.75	28.78	TWO	1.158	1.9	0.0	26.4										
42670.0	42838.0	0.378	310.4	-10.9	3.59	0.796	70.4	0.479	0.738	155.1	422.8	0.384	1.092	5.88	1.712	109.3	209.6	14.3	0.672
		7.96	17.82	25.78	TWO	1.158	1.9	0.0	30.9										
42680.0	42838.0	0.335	314.7	-8.4	3.67	0.790	74.3	0.451	0.730	158.7	416.8	0.401	1.059	5.25	1.708	106.8	214.5	14.0	0.618
		7.07	16.24	23.31	TWO	1.158	1.9	0.0	35.2										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42690.0	42838.0	0.297	317.1	-5.9	3.87	0.785	78.2	0.427	0.723	163.2	411.4	0.414	1.032	4.58	1.704	104.8	219.0	13.2	0.575
		6.35	14.96	21.31	TWO	1.158	1.9	0.0	39.1										
42700.0	42838.0	0.266	316.9	-3.6	4.22	0.782	82.3	0.409	0.717	168.6	406.9	0.424	1.011	3.80	1.701	103.2	223.0	11.7	0.540
		5.79	13.95	19.74	TWO	1.158	1.9	0.0	42.5										
42710.0	42838.0	0.245	313.5	-1.4	4.80	0.781	86.6	0.397	0.714	174.8	403.3	0.431	0.997	2.83	1.699	101.9	226.4	9.2	0.514
		5.44	13.19	18.63	TWO	1.158	1.9	0.0	45.2										
42720.0	42838.0	0.241	306.9	0.6	5.78	0.784	91.3	0.390	0.714	182.0	400.5	0.435	0.992A	1.49	1.699	101.1	228.9	5.0	0.497
		5.37	12.69	18.06	TWO	1.158	1.9	0.0	47.2										
42730.0	42838.0	0.263	298.9	2.9	7.54	0.794	96.5	0.391	0.719	190.4	398.9	0.438	1.000A	-0.61	1.701	100.7	230.3	-2.1	0.491
		5.73	12.55	18.28	TWO	1.158	1.9	0.0	48.4										
42740.0	42838.0	0.326	292.4	7.2	11.34	0.812	102.4	0.402	0.732	199.8	398.4	0.438	1.027A	-4.75	1.709	100.8	230.0	-15.7	0.514
		6.89	13.20	20.09	TWO	1.158	1.9	0.0	50.0										
42750.0	42838.0	0.507	291.8	18.5	24.00	0.846	109.0	0.428	0.761	210.4	399.3	0.435	1.087A	-17.72	1.724	101.5	222.5	-47.7	0.695
		10.90	18.49	29.39	TWO	1.158	1.9	0.0	59.3										
ARRIVAL DATE = 2442840.0																			
42660.0	42840.0	0.454	304.9	-12.6	4.26	0.801	64.4	0.537	0.745	152.0	434.9	0.345	1.145	6.60	1.718	114.4	205.5	12.8	0.814
		9.65	22.00	31.65	TWO	1.181	7.5	0.0	22.0										
42670.0	42840.0	0.401	311.0	-10.2	4.16	0.794	68.7	0.498	0.736	154.5	427.8	0.369	1.103	5.88	1.714	111.2	210.5	12.8	0.739
		8.46	19.79	28.25	TWO	1.181	7.5	0.0	26.1										
42680.0	42840.0	0.354	315.7	-7.6	4.18	0.787	72.8	0.466	0.728	157.9	421.4	0.388	1.067	5.17	1.709	108.5	215.0	12.4	0.678
		7.47	17.98	25.45	TWO	1.181	7.5	0.0	30.1										
42690.0	42840.0	0.314	318.5	-5.0	4.33	0.782	76.9	0.441	0.721	162.2	415.9	0.403	1.038	4.43	1.705	106.3	219.3	11.6	0.628
		6.66	16.52	23.17	TWO	1.181	7.5	0.0	33.6										
42700.0	42840.0	0.280	318.8	-2.5	4.63	0.778	81.1	0.420	0.715	167.3	411.2	0.414	1.015	3.60	1.702	104.5	223.0	10.1	0.588
		6.03	15.35	21.38	TWO	1.181	7.5	0.0	36.8										
42710.0	42840.0	0.256	316.0	-0.3	5.14	0.777	85.5	0.406	0.711	173.4	407.3	0.422	0.999	2.62	1.699	103.2	226.2	7.8	0.558
		5.61	14.47	20.07	TWO	1.181	7.5	0.0	39.4										
42720.0	42840.0	0.247	312.1	1.5	5.98	0.779	90.3	0.397	0.710	180.4	404.4	0.428	0.992A	1.34	1.699	102.2	228.6	4.1	0.537
		5.46	13.87	19.34	TWO	1.181	7.5	0.0	41.3										
42730.0	42840.0	0.262	302.2	3.2	7.43	0.787	95.5	0.396	0.714	188.5	402.6	0.431	0.997A	-0.52	1.701	101.7	230.0	-1.6	0.529
		5.72	13.65	19.36	TWO	1.181	7.5	0.0	42.6										
42740.0	42840.0	0.312	295.3	5.7	10.23	0.804	101.4	0.405	0.725	197.8	401.8	0.431	1.019A	-3.71	1.708	101.7	230.2	-11.5	0.543
		6.63	14.04	20.67	TWO	1.181	7.5	0.0	44.0										
42750.0	42840.0	0.426	292.2	11.9	17.15	0.835	107.9	0.428	0.751	208.0	402.3	0.429	1.072A	-11.01	1.721	102.3	227.3	-30.9	0.625
		9.02	16.43	25.44	TWO	1.181	7.5	0.0	48.8										
ARRIVAL DATE = 2442842.0																			
42660.0	42842.0	0.486	305.1	-12.2	4.93	0.799	62.2	0.563	0.743	151.8	440.3	0.325	1.162	6.78	1.723	116.9	207.0	11.6	0.900
		10.40	24.52	34.92	TWO	1.203	13.0	0.0	18.1										
42670.0	42842.0	0.428	311.6	-9.6	4.73	0.791	66.8	0.521	0.734	154.0	432.8	0.352	1.116	5.94	1.718	113.3	211.7	11.6	0.815
		9.06	22.01	31.07	TWO	1.203	13.0	0.0	21.9										
42680.0	42842.0	0.377	316.7	-6.9	4.68	0.784	71.2	0.485	0.725	157.1	426.2	0.373	1.078	5.14	1.713	110.4	216.1	11.1	0.745
		7.95	19.95	27.90	TWO	1.203	13.0	0.0	25.5										
42690.0	42842.0	0.333	319.9	-4.2	4.76	0.779	75.4	0.456	0.718	161.1	420.4	0.390	1.045	4.33	1.709	107.9	220.1	10.3	0.688
		7.04	18.27	25.31	TWO	1.203	13.0	0.0	28.8										
42700.0	42842.0	0.296	320.9	-1.6	5.00	0.774	79.7	0.434	0.712	166.0	415.4	0.403	1.020	3.45	1.705	106.0	223.7	8.9	0.642
		6.32	16.93	23.25	TWO	1.203	13.0	0.0	31.8										
42710.0	42842.0	0.268	318.9	0.6	5.43	0.772	84.2	0.417	0.707	171.8	411.3	0.412	1.002	2.46	1.703	104.5	226.7	6.7	0.607
		5.82	15.91	21.72	TWO	1.203	13.0	0.0	34.2										
42720.0	42842.0	0.254	313.6	2.4	6.15	0.774	89.1	0.406	0.706	178.6	408.2	0.419	0.992	1.22	1.702	103.4	229.0	3.5	0.583
		5.58	15.20	20.79	TWO	1.203	13.0	0.0	36.1										
42730.0	42842.0	0.263	306.0	3.6	7.35	0.781	94.4	0.403	0.708	186.5	406.1	0.423	0.994A	-0.46	1.704	102.8	230.5	-1.3	0.571
		5.73	14.87	20.60	TWO	1.203	13.0	0.0	37.5										
42740.0	42842.0	0.302	298.7	5.0	9.50	0.796	100.2	0.410	0.718	195.5	405.1	0.424	1.012A	-3.06	1.709	102.7	231.0	-8.8	0.579
		6.44	15.09	21.53	TWO	1.203	13.0	0.0	38.8										
42750.0	42842.0	0.389	294.4	8.3	14.00	0.823	106.8	0.429	0.740	205.5	405.2	0.423	1.058A	-8.00	1.721	103.2	229.5	-21.8	0.627
		8.19	16.50	24.69	TWO	1.203	13.0	0.0	41.8										
42760.0	42842.0	0.595	296.2	17.7	27.61	0.871	114.1	0.469	0.786	216.4	406.5	0.417	1.154A	-22.03	1.744	104.4	219.3	-48.0	0.852
		13.07	23.10	36.17	TWO	1.203	13.0	0.0	53.2										
ARRIVAL DATE = 2442844.0																			
42660.0	42844.0	0.524	305.3	-11.9	5.66	0.797	59.5	0.594	0.742	151.9	446.0	0.301	1.182	7.05	1.731	119.6	208.7	10.7	0.996
		11.30	27.36	38.66	TWO	1.225	18.6	0.0	14.6										
42670.0	42844.0	0.460	312.2	-9.2	5.33	0.789	64.5	0.547	0.732	153.6	438.0	0.331	1.132	6.06	1.725	115.7	213.3	10.5	0.899
		9.79	24.50	34.29	TWO	1.225	18.6	0.0	18.0										
42680.0	42844.0	0.404	317.7	-6.5	5.18	0.781	69.2	0.508	0.723	156.4	431.0	0.356	1.090	5.15	1.721	112.4	217.6	10.0	0.820
		8.53	22.15	30.68	TWO	1.225	18.6	0.0	21.4										
42690.0	42844.0	0.356	321.5	-3.7	5.19	0.775	73.7	0.475	0.715	160.0	424.9	0.375	1.055	4.27	1.716	109.7	221.4	9.2	0.754
		7.50	20.24	27.74	TWO	1.225	18.6	0.0	24.5										
42700.0	42844.0	0.315	323.1	-1.0	5.35	0.770	78.1	0.450	0.708	164.6	419.7	0.390	1.026	3.35	1.712	107.5	224.9	7.8	0.702
		6.68	18.70	25.38	TWO	1.225	18.6	0.0	27.3										
42710.0	42844.0	0.283	321.9	1.4	5.70	0.767	82.8	0.430	0.703	170.2	415.3	0.401	1.006	2.33	1.709	105.9	227.8	5.8	0.662
		6.08	17.51	23.59	TWO	1.225	18.6	0.0	29.7										
42720.0	42844.0	0.264	317.4	3.1	6.30	0.768	87.7	0.417	0.701	176.7	411.9	0.409	0.993	1.13	1.708	104.6	230.1	3.0	0.633
		5.75	16.67	22.42	TWO	1.225	18.6	0.0	31.6										
42730.0	42844.0	0.265	310.3	4.2	7.29	0.773	93.0	0.412	0.702	184.3	409.5	0.413	0.991A	-0.41	1.709	103.9	231.7	-1.1	0.618
		5.77	16.22	21.99	TWO	1.225	18.6	0.0	33.0										
42740.0	42844.0	0.295	302.7	4.8	8.98	0.786	98.9	0.415	0.710	193.0	408.2	0.415	1.005A	-2.62	1.713	103.6	232.3	-7.1	0.620
		6.31	16.28	22.59	TWO	1.225	18.6	0.0	34.3										
42750.0	42844.0	0.365	297.4	6.3	12.18	0.811	105.5	0.432	0.729	202.7	408.0	0.415	1.044A	-6.31	1.724	104.0	231.6	-16.4	0.652
		7.68	17.21	24.89	TWO	1.225	18.6	0.0	36.4										
42760.0	42844.0	0.501	296.3	11.4	19.71	0.854	112.8	0.466	0.768	213.4	408.9	0.410	1.126A	-14.31	1.744	105.0	227.6	-33.0	0.764
		10.75	20.51	31.26	TWO	1.225	18.6	0.0	42.8										
ARRIVAL DATE = 2442846.0																			
42660.0	42846.0	0.567	305.3	-11.7	6.46	0.795	56.5	0.630	0.740	152.3	452.0	0.274	1.206	7.41	1.741	122.7	210.6	9.9	1.104
		12.37	30.55	42.93	TWO	1.244	24.3	0.0	11.6										
42670.0	42846.0	0.497	312.7	-9.0	5.98	0.786	61.9	0.578	0.730	153.4	443.5	0.308	1.151	6.25	1.736	118.3	215.2	9.6	0.994
		10.66	27.30	37.96	TWO	1.244	24.3	0.0	14.5										
42680.0	42846.0	0.436	318.6	-6.2	5.71	0.778	66.9	0.534	0.720	155.7	436.1	0.336	1.105	5.22	1.731	114.7	219.4	9.1	0.903
		9.24	24.62	33.86	TWO	1.244	24.3	0.0	17.5										
42690.0	42846.0	0.383	323.0	-3.3	5.61	0.771	71.6	0.498	0.712	159.0	429.6	0.358	1.066	4.25	1.726	111.7	223.2	8.2	0.829
		8.06	22.43	30.50	TWO	1.244	24.3	0.0	20.5										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42700.0	42846.0	0.337	325.3	-0.5	5.69	0.765	76.3	0.468	0.705	163.3	424.0	0.374	1.035	3.28	1.722	109.3	226.5	6.9	0.769
		7.12	20.67	27.79	TWO	1.244	24.3	0.0	23.2										
42710.0	42846.0	0.300	325.0	1.9	5.94	0.762	81.0	0.446	0.699	168.5	419.3	0.387	1.011	2.24	1.719	107.4	229.4	5.1	0.722
		6.41	19.29	25.70	TWO	1.244	24.3	0.0	25.5										
42720.0	42846.0	0.276	321.4	3.8	6.43	0.761	86.0	0.430	0.696	174.7	415.6	0.396	0.995	1.06	1.717	105.9	231.7	2.5	0.688
		5.96	18.29	24.25	TWO	1.244	24.3	0.0	27.4										
42730.0	42846.0	0.270	314.9	4.7	7.24	0.765	91.5	0.422	0.696	182.0	412.9	0.402	0.990A	-0.38	1.717	105.0	233.3	-0.9	0.668
		5.85	17.69	23.55	TWO	1.244	24.3	0.0	29.0										
42740.0	42846.0	0.291	307.2	4.9	8.58	0.776	97.4	0.423	0.702	190.4	411.3	0.405	0.999A	-2.31	1.721	104.6	234.2	-5.8	0.665
		6.23	17.59	23.83	TWO	1.244	24.3	0.0	30.3										
42750.0	42846.0	0.347	301.1	5.3	10.96	0.798	104.0	0.435	0.718	199.8	410.8	0.405	1.031A	-5.23	1.730	104.8	234.0	-12.8	0.686
		7.32	18.22	25.54	TWO	1.244	24.3	0.0	32.0										
42760.0	42846.0	0.452	298.5	7.7	15.78	0.837	111.3	0.465	0.751	210.2	411.3	0.402	1.100A	-10.58	1.747	105.7	231.9	-24.1	0.756
		9.61	20.27	29.88	TWO	1.244	24.3	0.0	36.0										
ARRIVAL DATE = 2442848.0																			
42670.0	42848.0	0.540	313.0	-9.0	6.68	0.783	58.8	0.613	0.727	153.5	449.4	0.281	1.173	6.53	1.750	121.3	217.3	8.9	1.101
		11.70	30.47	42.16	TWO	1.263	30.2	0.0	11.3										
42680.0	42848.0	0.473	319.5	-6.0	6.26	0.775	64.2	0.564	0.717	155.3	441.4	0.313	1.122	5.35	1.744	117.2	221.5	8.3	0.998
		10.08	27.41	37.49	TWO	1.263	30.2	0.0	14.0										
42690.0	42848.0	0.414	324.4	-3.1	6.05	0.767	69.2	0.524	0.708	158.1	434.5	0.337	1.080	4.28	1.739	113.9	225.3	7.5	0.913
		8.75	24.90	33.64	TWO	1.263	30.2	0.0	16.8										
42700.0	42848.0	0.364	327.4	-0.2	6.02	0.760	74.1	0.491	0.701	162.0	428.5	0.357	1.045	3.24	1.735	111.2	228.6	6.2	0.844
		7.66	22.86	30.52	TWO	1.263	30.2	0.0	19.4										
42710.0	42848.0	0.322	328.0	2.4	6.18	0.756	79.0	0.465	0.695	166.8	423.5	0.372	1.017	2.17	1.731	109.0	231.4	4.5	0.789
		6.81	21.26	28.07	TWO	1.263	30.2	0.0	21.7										
42720.0	42848.0	0.291	325.6	4.3	6.54	0.754	84.2	0.446	0.690	172.7	419.4	0.383	0.998	1.01	1.728	107.4	233.7	2.2	0.749
		6.24	20.07	26.31	TWO	1.263	30.2	0.0	23.6										
42730.0	42848.0	0.278	319.9	5.3	7.19	0.756	89.7	0.435	0.690	179.6	416.4	0.390	0.990	-0.35	1.728	106.3	235.4	-0.8	0.723
		5.99	19.31	25.30	TWO	1.263	30.2	0.0	25.3										
42740.0	42848.0	0.289	312.2	5.3	8.26	0.765	95.7	0.432	0.694	187.6	414.4	0.394	0.994A	-2.07	1.731	105.7	236.4	-4.8	0.714
		6.20	19.03	25.23	TWO	1.263	30.2	0.0	26.7										
42750.0	42848.0	0.334	305.4	4.9	10.07	0.784	102.4	0.441	0.707	196.7	413.5	0.395	1.019A	-4.49	1.738	105.7	236.6	-10.4	0.726
		7.05	19.40	26.45	TWO	1.263	30.2	0.0	28.2										
42760.0	42848.0	0.420	301.6	5.5	13.41	0.819	109.8	0.466	0.735	206.8	413.6	0.393	1.077A	-8.41	1.753	106.4	235.5	-18.5	0.775
		8.87	20.83	29.69	TWO	1.263	30.2	0.0	31.0										
ARRIVAL DATE = 2442850.0																			
42670.0	42850.0	0.590	313.1	-9.1	7.48	0.781	55.2	0.653	0.725	153.9	455.7	0.251	1.199	6.91	1.766	124.8	219.5	8.2	1.222
		12.94	34.06	47.00	TWO	1.280	36.2	0.0	8.9										
42680.0	42850.0	0.515	320.2	-6.1	6.86	0.771	61.0	0.600	0.715	155.1	447.2	0.286	1.143	5.55	1.761	120.2	223.8	7.7	1.104
		11.10	30.55	41.65	TWO	1.280	36.2	0.0	10.8										
42690.0	42850.0	0.451	325.7	-3.0	6.50	0.762	66.4	0.554	0.705	157.4	439.7	0.314	1.096	4.35	1.755	116.4	227.6	6.8	1.006
		9.57	27.67	37.24	TWO	1.280	36.2	0.0	13.3										
42700.0	42850.0	0.395	329.5	-0.0	6.36	0.755	71.6	0.517	0.697	160.8	433.3	0.337	1.057	3.24	1.750	113.3	230.9	5.6	0.927
		8.32	25.32	33.64	TWO	1.280	36.2	0.0	15.8										
42710.0	42850.0	0.347	331.0	2.6	6.41	0.749	76.8	0.487	0.690	165.2	427.8	0.354	1.026	2.13	1.746	110.9	233.8	4.0	0.864
		7.32	23.45	30.77	TWO	1.280	36.2	0.0	18.1										
42720.0	42850.0	0.310	329.7	4.7	6.65	0.746	82.1	0.465	0.685	170.6	423.4	0.367	1.003	0.97	1.743	109.0	236.2	2.0	0.816
		6.60	22.04	28.63	TWO	1.280	36.2	0.0	20.1										
42730.0	42850.0	0.289	325.0	5.9	7.15	0.746	87.7	0.450	0.683	177.2	419.9	0.376	0.991	-0.33	1.742	107.6	238.0	-0.7	0.783
		6.20	21.67	27.27	TWO	1.280	36.2	0.0	21.8										
42740.0	42850.0	0.291	317.8	5.8	7.99	0.753	93.8	0.444	0.686	184.8	417.6	0.381	0.990A	-1.90	1.744	106.8	239.1	-4.1	0.767
		6.23	20.60	26.83	TWO	1.280	36.2	0.0	23.3										
42750.0	42850.0	0.324	310.4	4.9	9.38	0.769	100.6	0.449	0.696	193.5	416.3	0.383	1.008A	-3.96	1.750	106.6	239.5	-8.6	0.772
		6.85	20.74	27.59	TWO	1.280	36.2	0.0	24.8										
42760.0	42850.0	0.395	305.4	4.4	11.80	0.800	108.0	0.468	0.719	203.3	416.0	0.382	1.055A	-7.01	1.763	107.1	239.0	-14.8	0.806
		8.32	21.75	30.07	TWO	1.280	36.2	0.0	27.0										
ARRIVAL DATE = 2442852.0																			
42680.0	42852.0	0.565	320.7	-6.3	7.53	0.768	57.4	0.640	0.712	155.2	453.4	0.256	1.168	5.83	1.781	123.6	226.2	7.1	1.225
		12.31	34.13	46.45	TWO	1.295	42.3	0.0	8.1										
42690.0	42852.0	0.493	326.9	-3.1	7.00	0.758	63.2	0.589	0.702	156.9	445.4	0.288	1.116	4.48	1.775	119.3	230.2	6.2	1.113
		10.56	30.81	41.37	TWO	1.295	42.3	0.0	10.0										
42700.0	42852.0	0.431	331.4	-0.1	6.71	0.750	68.7	0.547	0.693	159.7	438.4	0.314	1.072	3.27	1.770	115.8	233.6	5.1	1.021
		9.12	28.09	37.21	TWO	1.295	42.3	0.0	12.3										
42710.0	42852.0	0.377	333.9	2.7	6.63	0.743	74.1	0.513	0.685	163.7	432.5	0.334	1.037	2.12	1.765	113.0	236.5	3.6	0.947
		7.95	25.91	33.86	TWO	1.295	42.3	0.0	14.6										
42720.0	42852.0	0.334	333.7	5.0	6.76	0.738	79.6	0.487	0.680	168.7	427.6	0.349	1.010	0.95	1.762	110.8	238.9	1.8	0.890
		7.06	24.22	31.28	TWO	1.295	42.3	0.0	16.7										
42730.0	42852.0	0.305	330.2	6.4	7.11	0.737	85.4	0.468	0.676	174.7	423.7	0.360	0.993	-0.31	1.760	109.2	240.8	-0.6	0.849
		6.49	23.02	29.51	TWO	1.295	42.3	0.0	18.5										
42740.0	42852.0	0.296	323.7	6.5	7.75	0.741	91.6	0.459	0.677	181.9	420.9	0.367	0.988A	-1.76	1.760	108.1	242.1	-3.6	0.826
		6.33	22.33	28.66	TWO	1.295	42.3	0.0	20.1										
42750.0	42852.0	0.317	316.1	5.3	8.82	0.754	98.5	0.459	0.685	190.3	419.2	0.370	0.999A	-3.57	1.765	107.7	242.8	-7.3	0.822
		6.73	22.23	28.96	TWO	1.295	42.3	0.0	21.7										
42760.0	42852.0	0.375	310.1	4.0	10.60	0.781	106.1	0.474	0.703	199.7	418.6	0.370	1.036A	-6.04	1.775	108.0	242.7	-12.1	0.845
		7.90	22.90	30.80	TWO	1.295	42.3	0.0	23.5										
ARRIVAL DATE = 2442854.0																			
42690.0	42854.0	0.543	327.8	-3.4	7.55	0.754	59.4	0.630	0.699	156.7	451.6	0.259	1.139	4.69	1.798	122.7	232.9	5.8	1.233
		11.76	34.39	46.15	TWO	1.310	48.7	0.0	7.1										
42700.0	42854.0	0.473	333.1	-0.2	7.09	0.744	65.3	0.583	0.689	158.9	444.0	0.287	1.091	3.35	1.792	118.6	236.4	4.7	1.127
		10.09	31.24	41.33	TWO	1.310	48.7	0.0	9.0										
42710.0	42854.0	0.413	336.5	2.7	6.87	0.736	71.1	0.544	0.681	162.3	437.5	0.310	1.051	2.12	1.787	115.4	239.5	3.3	1.041
		8.72	28.68	37.40	TWO	1.310	48.7	0.0	11.2										
42720.0	42854.0	0.363	337.5	5.1	6.87	0.730	76.8	0.513	0.674	166.8	432.1	0.328	1.020	0.93	1.783	112.9	242.0	1.6	0.973
		7.64	26.68	34.32	TWO	1.310	48.7	0.0	13.4										
42730.0	42854.0	0.325	335.4	6.8	7.07	0.726	82.8	0.490	0.670	172.4	427.7	0.341	0.998	-0.30	1.780	110.9	244.0	-0.5	0.923
		6.89	25.19	32.08	TWO	1.310	48.7	0.0	15.3										
42740.0	42854.0	0.307	329.9	7.1	7.53	0.728	89.2	0.476	0.669	179.1	424.4	0.350	0.988	-1.66	1.780	109.6	245.5	-3.1	0.891
		6.52	24.25	30.77	TWO	1.310	48.7	0.0	17.0										
42750.0	42854.0	0.315	322.3	6.0	8.33	0.738	96.2	0.473	0.674	187.0	422.3	0.355	0.992A	-3.27	1.783	108.9	246.3	-6.3	0.878
		6.69	23.89	30.58	TWO	1.310	48.7	0.0	18.7										

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EARTH-MERCURY

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
42760.0	42854.0	0.359	315.4	4.1	9.66	0.761	103.9	0.482	0.688	196.0	421.2	0.357	1.020A	-5.33	1.792	108.9	246.5	-10.2	0.891
		7.57	24.25	31.82	TWO	1.310	48.7	0.0	20.4										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
ARRIVAL DATE = 2443154.0																			
43010.0	43154.0	0.567	278.5	5.3	23.35	0.756	64.2	0.578	0.712	156.9	319.1	0.301D	1.123	-23.30	2.157	75.3	228.2	-45.1	1.165
		12.36	32.37	44.73	ONE	0.686	233.2	0.0	134.7										
43020.0	43154.0	0.498	287.1	-1.2	15.50	0.735	66.0	0.581	0.694	159.6	312.7	0.291D	1.098	-14.85	2.149	73.0	224.3	-30.0	1.052
		10.67	29.03	39.70	ONE	0.686	233.2	0.0	148.8										
43030.0	43154.0	0.464	293.8	-4.5	11.78	0.713	68.2	0.586	0.677	162.5	306.2	0.280D	1.074	-10.49	2.140	70.6	225.1	-20.4	1.057
		9.89	29.16	39.04	ONE	0.686	233.2	0.0	158.1										
43040.0	43154.0	0.443	299.0	-6.2	9.69	0.689	70.8	0.593	0.659	165.6	299.7	0.268D	1.051	-7.74	2.131	68.3	226.9	-14.0	1.098
		9.39	30.39	39.78	ONE	0.686	233.2	0.0	164.6										
43050.0	43154.0	0.426	302.8	-7.0	8.43	0.663	74.3	0.603	0.643	169.0	293.4	0.255D	1.030	-5.75	2.122	66.0	229.0	-9.7	1.154
		9.02	32.04	41.06	ONE	0.686	233.2	0.0	169.5										
43060.0	43154.0	0.414	305.0	-7.7	7.64	0.638	78.8	0.614	0.627	172.7	287.4	0.242D	1.012	-4.16	2.113	63.7	231.1	-6.5	1.216
		8.75	33.87	42.62	ONE	0.686	233.2	0.0	173.2										
43070.0	43154.0	0.410	305.0	-8.5	7.18	0.615	84.9	0.627	0.614	176.9	281.8	0.229D	0.998	-2.81	2.105	61.5	233.1	-4.1	1.279
		8.64	35.75	44.40	ONE	0.686	233.2	0.0	175.9										
43080.0	43154.0	0.418	302.6	-9.8	6.97	0.601	93.1	0.643	0.605	181.7	276.7	0.216D	0.994A	-1.56	2.099	59.3	235.0	-2.1	1.344
		8.83	37.66	46.49	ONE	0.686	233.2	0.0	177.3										
43090.0	43154.0	0.451	297.9	-11.7	6.97	0.606	104.0	0.663	0.606	187.4	272.5	0.204D	1.007A	-0.35	2.099	57.2	236.5	-0.4	1.409
		9.59	39.60	49.18	ONE	0.686	233.2	0.0	176.8										
43100.0	43154.0	0.529	291.9	-13.9	7.18	0.654	117.5	0.690	0.627	194.6	269.6	0.195D	1.059A	0.90	2.113	55.3	237.4	1.1	1.478
		11.42	41.64	53.06	ONE	0.686	233.2	0.0	175.7										
ARRIVAL DATE = 2443156.0																			
43020.0	43156.0	0.551	282.9	9.3	25.02	0.747	68.0	0.552	0.703	159.2	322.5	0.315D	1.091	-23.72	2.112	76.8	237.3	-46.3	1.144
		11.97	31.73	43.69	ONE	0.708	243.9	0.0	133.3										
43030.0	43156.0	0.465	291.3	2.6	16.23	0.727	70.4	0.553	0.687	162.3	316.4	0.307D	1.067	-14.32	2.104	74.8	232.3	-29.9	1.008
		9.90	27.71	37.61	ONE	0.708	243.9	0.0	148.1										
43040.0	43156.0	0.424	297.1	-1.1	12.17	0.707	73.2	0.557	0.671	165.6	310.3	0.297D	1.044	-9.63	2.096	72.7	232.9	-19.5	1.003
		8.97	27.57	36.54	ONE	0.708	243.9	0.0	157.7										
43050.0	43156.0	0.399	300.8	-3.2	9.94	0.686	76.8	0.563	0.656	169.2	304.3	0.287D	1.024	-6.72	2.087	70.6	234.6	-12.8	1.037
		8.41	28.57	36.98	ONE	0.708	243.9	0.0	164.2										
43060.0	43156.0	0.382	302.6	-4.8	8.59	0.667	81.3	0.570	0.642	173.3	298.7	0.276D	1.008	-4.64	2.079	68.6	236.5	-8.3	1.084
		8.04	29.96	38.00	ONE	0.708	243.9	0.0	168.9										
43070.0	43156.0	0.374	301.9	-6.3	7.76	0.650	87.2	0.580	0.631	177.9	293.5	0.265D	0.997	-3.01	2.073	66.6	238.4	-5.0	1.135
		7.87	31.47	39.35	ONE	0.708	243.9	0.0	172.5										
43080.0	43156.0	0.381	298.6	-8.3	7.27	0.644	94.8	0.593	0.625	183.3	289.0	0.255D	0.996A	-1.62	2.070	64.9	240.0	-2.6	1.187
		8.03	33.01	41.04	ONE	0.708	243.9	0.0	175.3										
43090.0	43156.0	0.416	293.1	-10.8	7.03	0.656	104.7	0.609	0.630	189.9	285.6	0.246D	1.014A	-0.35	2.072	63.2	241.2	-0.5	1.238
		8.78	34.52	43.30	ONE	0.708	243.9	0.0	177.2										
43100.0	43156.0	0.495	286.9	-13.5	7.01	0.708	116.5	0.635	0.657	198.1	283.9	0.240D	1.074A	0.88	2.088	61.9	241.7	1.3	1.289
		10.60	36.05	46.65	ONE	0.708	243.9	0.0	177.4										
ARRIVAL DATE = 2443158.0																			
43030.0	43158.0	0.523	286.7	12.6	25.11	0.740	72.2	0.525	0.695	162.2	325.9	0.330D	1.061	-22.64	2.065	78.4	243.9	-46.0	1.082
		11.28	29.89	41.17	ONE	0.737	254.0	0.0	133.1										
43040.0	43158.0	0.427	294.2	5.8	16.08	0.723	75.2	0.526	0.681	165.8	320.4	0.323D	1.039	-13.01	2.057	76.6	239.1	-28.5	0.945
		9.03	25.85	34.88	ONE	0.737	254.0	0.0	148.1										
43050.0	43158.0	0.383	298.3	1.6	11.98	0.706	78.9	0.528	0.667	169.7	314.8	0.315D	1.020	-8.29	2.050	74.7	239.6	-17.7	0.937
		8.07	25.62	33.69	ONE	0.737	254.0	0.0	157.3										
43060.0	43158.0	0.358	299.7	-1.3	9.74	0.691	83.4	0.532	0.656	174.1	309.5	0.307D	1.005	-5.39	2.043	73.0	241.2	-11.0	0.965
		7.54	26.44	33.98	ONE	0.737	254.0	0.0	163.2										
43070.0	43158.0	0.347	298.4	-3.9	8.41	0.680	89.1	0.539	0.647	179.2	304.9	0.298D	0.996	-3.34	2.038	71.3	242.9	-6.4	1.003
		7.31	27.56	34.87	ONE	0.737	254.0	0.0	167.2										
43080.0	43158.0	0.354	294.3	-6.8	7.58	0.680	96.3	0.549	0.644	185.3	301.0	0.291D	0.998A	-1.73	2.037	69.9	244.3	-3.2	1.043
		7.45	28.74	36.20	ONE	0.737	254.0	0.0	169.8										
43090.0	43158.0	0.390	288.3	-10.0	7.09	0.698	105.3	0.564	0.653	192.6	298.4	0.285D	1.022A	-0.36	2.042	68.6	245.2	-0.6	1.081
		8.22	29.88	38.11	ONE	0.737	254.0	0.0	171.1										
43100.0	43158.0	0.472	282.1	-13.1	6.86	0.753	116.0	0.590	0.687	202.0	297.8	0.281D	1.092A	0.88	2.060	67.7	245.2	1.5	1.119
		10.07	30.99	41.06	ONE	0.737	254.0	0.0	171.1										
ARRIVAL DATE = 2443160.0																			
43010.0	43160.0	0.535	282.1	-58.3	-25.06	0.779	69.2	0.506	0.730	156.2	351.6	0.361D	1.100	26.94	2.038	87.2	246.4	63.7	1.028
		11.57	28.32	39.89	TWO	0.770	263.4	0.0	115.0										
43040.0	43160.0	0.480	289.6	14.9	23.63	0.736	76.9	0.499	0.690	166.1	329.7	0.346D	1.034	-20.09	2.018	80.0	248.3	-43.9	0.985
		10.26	27.02	37.29	ONE	0.770	263.4	0.0	134.1										
43050.0	43160.0	0.386	295.1	7.8	15.12	0.722	80.6	0.498	0.678	170.3	324.7	0.340D	1.016	-11.01	2.012	78.4	244.5	-25.7	0.867
		8.13	23.56	31.68	ONE	0.770	263.4	0.0	148.4										
43060.0	43160.0	0.345	296.6	2.9	11.28	0.711	85.1	0.500	0.668	175.1	319.9	0.334D	1.003	-6.57	2.006	76.9	245.2	-15.0	0.862
		7.27	23.40	30.67	ONE	0.770	263.4	0.0	156.5										
43070.0	43160.0	0.328	294.7	-1.1	9.18	0.705	90.7	0.505	0.662	180.7	315.8	0.328D	0.996A	-3.84	2.003	75.5	246.6	-8.5	0.884
		6.93	24.06	30.99	ONE	0.770	263.4	0.0	161.2										
43080.0	43160.0	0.334	289.9	-5.1	7.93	0.709	97.6	0.513	0.662	187.3	312.5	0.322D	1.002A	-1.91	2.003	74.3	247.8	-4.0	0.913
		7.06	24.90	31.97	ONE	0.770	263.4	0.0	163.8										
43090.0	43160.0	0.373	283.6	-9.2	7.16	0.733	106.0	0.528	0.675	195.5	310.8	0.319D	1.031A	-0.39	2.010	73.4	248.3	-0.8	0.941
		7.86	25.73	33.59	ONE	0.770	263.4	0.0	164.8										
43100.0	43160.0	0.458	277.8	-12.8	6.71	0.790	115.8	0.555	0.715	205.8	311.1	0.318D	1.111A	0.91	2.030	73.0	247.8	1.8	0.967
		9.74	26.50	36.24	ONE	0.770	263.4	0.0	164.3										
ARRIVAL DATE = 2443162.0																			
43010.0	43162.0	0.436	286.1	-48.8	-15.04	0.785	70.1	0.491	0.735	156.1	359.8	0.374D	1.096	17.48	1.997	89.9	233.2	53.8	0.743
		9.24	19.90	29.13	TWO	0.806	272.3	0.0	117.3										
43020.0	43162.0	0.505	291.3	-59.7	-24.49	0.772	72.7	0.483	0.722	159.3	353.8	0.373D	1.071	27.44	1.991	88.0	253.7	64.9	1.013
		10.84	27.85	38.69	TWO	0.806	272.3	0.0	113.7										
43050.0	43162.0	0.427	291.0	15.9	20.91	0.736	82.0	0.474	0.687	171.0	334.0	0.362D	1.013	-16.42	1.974	81.7	250.8	-39.6	0.867
		9.03	23.54	32.58	ONE	0.806	272.3	0.0	135.9										
43060.0	43162.0	0.346	293.2	8.2	13.55	0.728	86.6	0.474	0.679	176.2	329.8	0.357D	1.001	-8.53	1.969	80.4	248.7	-21.6	0.782
		7.29	21.04	28.33	ONE	0.806	272.3	0.0	148.4										
43070.0	43162.0	0.317	291.1	2.1	10.19	0.726	92.0	0.477	0.675	182.2	326.1	0.353D	0.997A	-4.61	1.967	79.2	249.5	-11.5	0.781
		6.73	21.01	27.74	ONE	0.806	272.3	0.0	154.6										
43080.0	43162.0	0.322	285.9	-3.4	8.34	0.734	98.7	0.484	0.678	189.5	323.5	0.350D	1.006A	-2.17	1.969	78.3	250.3	-5.2	0.798
		6.81	21.51	28.32	ONE	0.806	272.3	0.0	157.4										
43090.0	43162.0	0.362	279.4	-8.5	7.23	0.761	106.6	0.499	0.694	198.3	322.5	0.348D	1.041A	-0.42	1.977	77.7	250.5	-1.0	0.817
		7.64	22.07	29.70	ONE	0.806	272.3	0.0	158.2										
43100.0	43162.0	0.450	274.1	-12.6	6.56	0.820	115.7	0.529	0.740	209.4	323.5	0.349D	1.131A	0.96	2.000	77.6	249.5	2.2	0.834
		9.55	22.58	32.13	ONE	0.806	272.3	0.0	157.0										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
43110.0	43162.0	0.598	271.1	-15.6	6.17	0.933	125.6	0.593	0.865	223.3	327.4	0.352D	1.378A	2.14	2.048	78.0	246.3	5.0	0.854
		13.15	23.16	36.30	ONE	0.806	272.3	0.0	153.6										
ARRIVAL DATE = 2443164.0																			
43010.0	43164.0	0.395	286.8	-42.4	-10.29	0.789	70.9	0.480	0.738	156.0	367.7	0.384	1.092	13.26	1.958	92.5	227.9	47.8	0.606
		8.32	15.88	24.20	TWO	0.844	280.6	0.0	114.0										
43020.0	43164.0	0.401	293.7	-49.5	-14.34	0.777	73.5	0.470	0.726	159.3	361.6	0.385	1.067	17.79	1.953	90.5	239.1	54.8	0.730
		8.46	19.52	27.97	TWO	0.844	280.6	0.0	115.5										
43030.0	43164.0	0.482	298.8	-61.6	-24.48	0.766	76.5	0.461	0.715	163.1	356.2	0.385D	1.045	28.39	1.947	88.8	261.1	66.8	1.007
		10.29	27.68	37.97	TWO	0.844	280.6	0.0	111.7										
43050.0	43164.0	0.595	285.1	24.2	35.61	0.747	83.1	0.454	0.695	171.6	342.3	0.380D	1.011	-30.78	1.937	84.5	272.2	-62.1	1.117
		13.06	30.93	43.99	ONE	0.844	280.6	0.0	117.6										
43060.0	43164.0	0.372	286.7	15.0	17.49	0.742	87.7	0.452	0.689	177.2	339.0	0.377D	1.000	-12.19	1.933	83.5	252.2	-32.9	0.746
		7.83	19.98	27.81	ONE	0.844	280.6	0.0	137.6										
43070.0	43164.0	0.316	287.8	5.9	11.62	0.742	93.1	0.454	0.686	183.7	335.9	0.375D	0.998A	-5.83	1.932	82.5	251.4	-16.2	0.695
		6.71	18.49	25.20	ONE	0.844	280.6	0.0	146.9										
43080.0	43164.0	0.315	282.3	-1.6	8.85	0.753	99.5	0.461	0.692	191.5	333.9	0.373D	1.010A	-2.55	1.935	81.8	251.9	-7.0	0.698
		6.68	18.56	25.24	ONE	0.844	280.6	0.0	150.4										
43090.0	43164.0	0.356	275.9	-7.8	7.32	0.783	107.1	0.477	0.711	200.9	333.4	0.372D	1.050A	-0.47	1.945	81.5	251.6	-1.3	0.709
		7.50	18.90	26.40	ONE	0.844	280.6	0.0	151.0										
43100.0	43164.0	0.445	271.1	-12.5	6.39	0.843	115.7	0.510	0.762	212.5	335.0	0.373D	1.150A	1.04	1.969	81.6	249.9	2.8	0.721
		9.43	19.24	28.68	ONE	0.844	280.6	0.0	149.2										
43110.0	43164.0	0.592	268.9	-15.7	5.83	0.954	125.0	0.580	0.895	226.7	339.1	0.376D	1.414A	2.25	2.018	82.4	245.7	6.1	0.736
		13.00	19.69	32.68	ONE	0.844	280.6	0.0	144.6										
ARRIVAL DATE = 2443166.0																			
43010.0	43166.0	0.373	286.8	-37.8	-7.46	0.792	71.4	0.471	0.741	156.0	375.3	0.392	1.090	10.95	1.922	94.9	222.9	43.9	0.525
		7.85	13.52	21.37	TWO	0.882	288.5	0.0	107.3										
43020.0	43166.0	0.359	293.6	-42.3	-9.53	0.781	74.2	0.459	0.730	159.3	369.2	0.395	1.065	13.46	1.916	92.9	232.9	48.4	0.596
		7.56	15.58	23.14	TWO	0.882	288.5	0.0	112.1										
43030.0	43166.0	0.367	299.6	-50.3	-13.71	0.772	77.2	0.449	0.719	163.2	363.6	0.396	1.042	18.06	1.911	91.1	243.7	56.0	0.714
		7.74	19.06	26.79	TWO	0.882	288.5	0.0	113.4										
43040.0	43166.0	0.471	304.1	-64.2	-25.30	0.763	80.6	0.441	0.710	167.7	358.8	0.397D	1.023	30.06	1.906	89.6	269.5	69.8	1.017
		10.05	27.99	38.05	TWO	0.882	288.5	0.0	109.1										
43060.0	43166.0	0.470	286.0	23.3	26.47	0.753	88.6	0.435	0.697	178.2	347.5	0.394D	0.999	-20.90	1.899	86.2	260.6	-53.3	0.843
		10.02	22.84	32.86	ONE	0.882	288.5	0.0	121.9										
43070.0	43166.0	0.329	284.9	10.9	13.94	0.756	93.9	0.436	0.696	185.1	345.1	0.393D	0.999A	-7.95	1.899	85.5	252.6	-24.3	0.636
		6.96	16.76	23.72	ONE	0.882	288.5	0.0	137.6										
43080.0	43166.0	0.313	279.3	0.5	9.56	0.769	100.2	0.443	0.703	193.3	343.5	0.392D	1.015A	-3.14	1.903	85.0	252.2	-9.7	0.613
		6.65	16.09	22.74	ONE	0.882	288.5	0.0	142.6										
43090.0	43166.0	0.353	273.1	-7.2	7.42	0.800	107.4	0.460	0.725	203.2	343.5	0.391D	1.059A	-0.55	1.914	84.8	251.5	-1.7	0.617
		7.43	16.21	23.64	ONE	0.882	288.5	0.0	143.0										
43100.0	43166.0	0.441	268.8	-12.5	6.21	0.860	115.7	0.496	0.779	215.1	345.4	0.392D	1.166A	1.15	1.939	85.2	249.1	3.5	0.626
		9.36	16.47	25.83	ONE	0.882	288.5	0.0	140.5										
43110.0	43166.0	0.587	267.2	-16.0	5.48	0.968	124.6	0.571	0.918	229.2	349.5	0.394D	1.442A	2.41	1.988	86.2	243.8	7.5	0.641
		12.87	16.91	29.78	ONE	0.882	288.5	0.0	134.8										
ARRIVAL DATE = 2443168.0																			
43010.0	43168.0	0.360	286.8	-34.3	-5.53	0.794	71.7	0.465	0.743	155.9	382.6	0.397	1.089	9.54	1.888	97.1	217.1	40.8	0.475
		7.59	12.07	19.66	TWO	0.920	295.9	0.0	98.4										
43020.0	43168.0	0.337	293.1	-37.0	-6.67	0.785	74.6	0.451	0.733	159.4	376.5	0.402	1.063	11.07	1.883	95.1	227.4	44.1	0.517
		7.13	13.30	20.43	TWO	0.920	295.9	0.0	105.3										
43030.0	43168.0	0.324	298.4	-42.1	-8.73	0.776	77.7	0.439	0.723	163.4	370.9	0.405	1.040	13.50	1.878	93.3	236.7	48.9	0.581
		6.85	15.14	22.00	TWO	0.920	295.9	0.0	109.6										
43040.0	43168.0	0.337	302.9	-51.7	-13.16	0.768	81.2	0.430	0.714	168.0	365.9	0.407	1.021	18.28	1.873	91.8	246.9	57.4	0.697
		7.11	18.54	25.65	TWO	0.920	295.9	0.0	110.7										
43050.0	43168.0	0.487	306.6	-67.5	-27.68	0.763	85.1	0.424	0.707	173.3	362.0	0.407	1.007	33.15	1.870	90.6	282.0	74.0	1.063
		10.41	29.36	39.77	TWO	0.920	295.9	0.0	105.5										
43070.0	43168.0	0.374	282.7	17.9	18.61	0.766	94.5	0.422	0.703	186.3	353.6	0.407D	1.000A	-12.44	1.868	88.1	254.0	-39.3	0.635
		7.88	16.73	24.61	ONE	0.920	295.9	0.0	125.2										
43080.0	43168.0	0.317	277.1	3.3	10.62	0.781	100.6	0.430	0.712	194.8	352.5	0.406D	1.018A	-4.10	1.872	87.7	251.4	-14.2	0.546
		6.72	14.14	20.86	ONE	0.920	295.9	0.0	133.7										
43090.0	43168.0	0.351	271.0	-6.6	7.55	0.813	107.7	0.448	0.736	205.0	352.7	0.406D	1.066A	-0.66	1.885	87.8	250.1	-2.3	0.542
		7.39	14.01	21.40	ONE	0.920	295.9	0.0	134.2										
43100.0	43168.0	0.439	267.2	-12.6	5.99	0.872	115.6	0.487	0.792	217.1	354.8	0.407D	1.178A	1.30	1.910	88.3	247.0	4.5	0.550
		9.29	14.26	23.55	ONE	0.920	295.9	0.0	130.9										
43110.0	43168.0	0.582	266.1	-16.3	5.08	0.977	124.2	0.563	0.933	231.0	358.7	0.407D	1.459A	2.63	1.959	89.5	240.6	9.1	0.569
		12.73	14.80	27.54	ONE	0.920	295.9	0.0	124.2										
ARRIVAL DATE = 2443170.0																			
43010.0	43170.0	0.353	286.7	-31.4	-4.08	0.796	71.9	0.462	0.744	155.8	389.4	0.400	1.088	8.61	1.857	99.2	210.8	37.8	0.448
		7.45	11.29	18.74	TWO	0.956	303.0	0.0	88.3										
43020.0	43170.0	0.326	292.7	-33.0	-4.73	0.787	74.9	0.446	0.734	159.3	383.4	0.407	1.062	9.59	1.852	97.2	221.5	40.6	0.470
		6.89	11.94	18.83	TWO	0.956	303.0	0.0	96.4										
43030.0	43170.0	0.303	297.4	-36.1	-5.82	0.779	78.1	0.433	0.725	163.4	377.8	0.411	1.039	11.00	1.847	95.4	230.7	43.9	0.506
		6.46	12.96	19.41	TWO	0.956	303.0	0.0	102.7										
43040.0	43170.0	0.291	300.6	-42.1	-7.88	0.772	81.6	0.422	0.717	168.2	372.9	0.414	1.020	13.35	1.843	93.8	238.9	49.1	0.562
		6.22	14.59	20.81	TWO	0.956	303.0	0.0	106.6										
43050.0	43170.0	0.312	302.5	-53.7	-12.73	0.768	85.5	0.415	0.711	173.6	368.7	0.416	1.006	18.49	1.840	92.6	248.3	59.1	0.679
		6.63	18.02	24.65	TWO	0.956	303.0	0.0	107.2										
43060.0	43170.0	0.563	306.6	-70.9	-34.00	0.768	90.1	0.411	0.708	180.1	366.0	0.417	0.999A	40.05	1.838	91.7	315.9	78.8	1.205
		12.27	33.54	45.82	TWO	0.956	303.0	0.0	100.9										
43070.0	43170.0	0.557	282.4	26.6	33.27	0.774	94.9	0.412	0.709	187.1	361.1	0.417	1.001A	-26.94	1.839	90.3	269.5	-68.5	0.895
		12.12	24.38	36.50	ONE	0.956	303.0	0.0	107.8										
43080.0	43170.0	0.330	275.8	7.3	12.53	0.789	101.0	0.420	0.719	196.0	360.6	0.417	1.021A	-5.90	1.844	90.2	249.4	-22.1	0.504
		6.98	12.91	19.89	ONE	0.956	303.0	0.0	123.4										
43090.0	43170.0	0.349	269.6	-5.9	7.74	0.822	107.8	0.439	0.744	206.3	361.1	0.417	1.071A	-0.82	1.857	90.3	247.3	-3.2	0.483
		7.37	12.30	19.67	ONE	0.956	303.0	0.0	124.3										
43100.0	43170.0	0.435	266.1	-12.9	5.71	0.881	115.5	0.479	0.801	218.4	363.2	0.417	1.185A	1.52	1.882	91.0	243.5	5.8	0.493
		9.22	12.60	21.82	ONE	0.956	303.0	0.0	120.3										
43110.0	43170.0	0.576	265.5	-16.8	4.63	0.982	123.8	0.557	0.941	232.1	366.8	0.416	1.465A	2.93	1.931	92.4	236.3	10.9	0.519
		12.58	13.34	25.92	ONE	0.956	303.0	0.0	112.8										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2443172.0											
43010.0	43172.0	0.351	286.7	-28.9	-2.92	0.797	71.8	0.462	0.745	155.6	395.9	0.401	1.089	7.98	1.829	101.2	204.7	34.5	0.440
		7.41	11.06	18.46	TWO	0.992	309.7	0.0	77.6										
43020.0	43172.0	0.320	292.5	-29.8	-3.28	0.788	74.9	0.444	0.736	159.2	389.9	0.409	1.062	8.61	1.824	99.1	215.2	37.2	0.446
		6.79	11.24	18.02	TWO	0.992	309.7	0.0	86.4										
43030.0	43172.0	0.293	296.7	-31.5	-3.87	0.781	78.2	0.429	0.727	163.4	384.4	0.415	1.039	9.45	1.820	97.3	224.5	39.9	0.462
		6.26	11.71	17.97	TWO	0.992	309.7	0.0	93.7										
43040.0	43172.0	0.271	299.0	-35.0	-4.89	0.775	81.8	0.417	0.720	168.2	379.6	0.420	1.020	10.71	1.816	95.7	232.4	43.2	0.490
		5.87	12.51	18.38	TWO	0.992	309.7	0.0	99.2										
43050.0	43172.0	0.262	299.0	-41.9	-6.92	0.772	85.8	0.409	0.714	173.9	375.4	0.422	1.006	12.97	1.813	94.5	239.3	48.8	0.539
		5.72	13.93	19.64	TWO	0.992	309.7	0.0	102.7										
43060.0	43172.0	0.298	297.4	-55.7	-12.46	0.772	90.3	0.404	0.711	180.4	372.2	0.424	0.999A	18.73	1.811	93.5	247.2	61.0	0.664
		6.36	17.57	23.93	TWO	0.992	309.7	0.0	103.0										
43080.0	43172.0	0.374	275.8	14.6	17.12	0.795	101.1	0.412	0.724	196.7	368.1	0.426	1.023A	-10.41	1.818	92.4	246.9	-39.0	0.521
		7.87	13.41	21.28	ONE	0.992	309.7	0.0	110.8										
43090.0	43172.0	0.349	268.8	-5.0	8.04	0.828	107.8	0.433	0.750	207.2	368.7	0.425	1.074A	-1.11	1.831	92.6	243.3	-4.6	0.440
		7.36	11.07	18.43	ONE	0.992	309.7	0.0	113.5										
43100.0	43172.0	0.431	265.4	-13.4	5.34	0.885	115.3	0.474	0.806	219.2	370.7	0.424	1.188A	1.83	1.856	93.4	239.0	7.5	0.455
		9.12	11.48	20.60	ONE	0.992	309.7	0.0	109.1										
43110.0	43172.0	0.568	265.2	-17.5	4.08	0.982	123.4	0.551	0.942	232.5	373.9	0.422	1.461A	3.34	1.904	94.9	231.3	13.0	0.489
		12.39	12.48	24.87	ONE	0.992	309.7	0.0	101.3										
								ARRIVAL DATE = 2443174.0											
43010.0	43174.0	0.353	286.5	-26.7	-1.95	0.797	71.5	0.464	0.746	155.4	402.1	0.400	1.091	7.54	1.804	103.0	199.4	31.0	0.448
		7.44	11.30	18.74	TWO	1.026	316.2	0.0	67.3										
43020.0	43174.0	0.319	292.4	-27.0	-2.13	0.789	74.8	0.444	0.736	159.0	396.1	0.410	1.063	7.93	1.799	100.9	209.4	33.6	0.440
		6.76	11.07	17.84	TWO	1.026	316.2	0.0	76.1										
43030.0	43174.0	0.289	296.3	-27.8	-2.43	0.782	78.2	0.427	0.728	163.2	390.6	0.417	1.039	8.42	1.795	99.0	218.4	36.0	0.442
		6.19	11.12	17.31	TWO	1.026	316.2	0.0	83.7										
43040.0	43174.0	0.262	298.2	-29.7	-2.93	0.777	81.9	0.414	0.721	168.2	385.8	0.423	1.020	9.09	1.791	97.5	226.2	38.4	0.452
		5.72	11.42	17.14	TWO	1.026	316.2	0.0	90.0										
43050.0	43174.0	0.244	297.2	-33.5	-3.83	0.774	85.9	0.405	0.716	173.9	381.8	0.426	1.006	10.16	1.788	96.2	232.6	41.6	0.472
		5.42	12.00	17.41	TWO	1.026	316.2	0.0	94.8										
43060.0	43174.0	0.243	292.9	-40.8	-5.78	0.775	90.3	0.399	0.714	180.5	378.6	0.429	0.999A	12.27	1.787	95.3	237.7	47.4	0.513
		5.39	13.18	18.57	TWO	1.026	316.2	0.0	97.8										
43070.0	43174.0	0.302	287.9	-56.7	-12.52	0.783	95.4	0.400	0.717	188.3	376.5	0.430	1.003A	19.16	1.789	94.7	243.2	63.0	0.657
		6.43	17.36	23.79	TWO	1.026	316.2	0.0	97.6										
43090.0	43174.0	0.350	268.6	-3.6	8.64	0.831	107.7	0.428	0.753	207.6	375.6	0.431	1.075A	-1.68	1.807	94.6	238.5	-7.3	0.415
		7.38	10.33	17.71	ONE	1.026	316.2	0.0	102.2										
43100.0	43174.0	0.425	265.2	-14.3	4.79	0.886	115.0	0.469	0.808	219.4	377.4	0.429	1.187A	2.33	1.832	95.5	233.9	9.9	0.434
		8.99	10.88	19.87	ONE	1.026	316.2	0.0	97.6										
43110.0	43174.0	0.559	265.2	-18.4	3.37	0.980	122.9	0.545	0.937	232.4	380.3	0.426	1.447A	3.91	1.878	97.1	226.3	15.4	0.478
		12.16	12.15	24.31	ONE	1.026	316.2	0.0	90.1										
								ARRIVAL DATE = 2443176.0											
43010.0	43176.0	0.358	287.1	-24.8	-1.10	0.797	71.1	0.469	0.745	155.1	408.0	0.396	1.095	7.25	1.782	104.9	195.5	27.5	0.470
		7.54	11.94	19.48	TWO	1.059	322.4	0.0	57.8										
43020.0	43176.0	0.322	292.5	-24.6	-1.17	0.789	74.5	0.446	0.737	158.7	402.0	0.408	1.065	7.45	1.777	102.6	204.5	30.0	0.450
		6.81	11.36	18.17	TWO	1.059	322.4	0.0	66.1										
43030.0	43176.0	0.289	296.3	-24.8	-1.30	0.783	78.0	0.428	0.729	163.0	396.5	0.417	1.040	7.70	1.773	100.7	212.9	32.1	0.440
		6.19	11.05	17.24	TWO	1.059	322.4	0.0	73.6										
43040.0	43176.0	0.260	297.8	-25.6	-1.51	0.778	81.8	0.413	0.722	167.9	391.8	0.423	1.020	8.02	1.769	99.1	220.4	33.9	0.437
		5.68	10.98	16.66	TWO	1.059	322.4	0.0	80.1										
43050.0	43176.0	0.238	296.4	-27.4	-1.87	0.776	85.8	0.403	0.717	173.7	387.8	0.428	1.006	8.48	1.767	97.9	226.6	35.8	0.441
		5.32	11.10	16.41	TWO	1.059	322.4	0.0	85.3										
43060.0	43176.0	0.228	291.3	-30.9	-2.56	0.777	90.3	0.397	0.715	180.4	384.6	0.431	0.999A	9.26	1.766	96.9	231.3	38.4	0.454
		5.15	11.45	16.61	TWO	1.059	322.4	0.0	89.1										
43070.0	43176.0	0.239	283.3	-36.9	-4.24	0.784	95.3	0.397	0.718	188.2	382.5	0.433	1.003A	11.04	1.767	96.3	234.2	43.9	0.485
		5.34	12.36	17.69	TWO	1.059	322.4	0.0	91.3										
43080.0	43176.0	0.335	278.2	-56.9	-13.66	0.801	101.0	0.405	0.729	197.2	381.7	0.434	1.024A	20.54	1.773	96.2	235.5	65.9	0.677
		7.08	17.97	25.05	TWO	1.059	322.4	0.0	91.2										
43090.0	43176.0	0.359	269.3	0.2	10.45	0.832	107.5	0.425	0.753	207.5	381.7	0.434	1.073A	-3.48	1.786	96.4	233.3	-15.2	0.411
		7.56	10.22	17.78	ONE	1.059	322.4	0.0	90.9										
43100.0	43176.0	0.417	265.3	-15.9	3.86	0.885	114.7	0.465	0.806	219.1	383.4	0.431	1.181A	3.21	1.810	97.4	228.9	13.5	0.430
		8.82	10.78	19.59	ONE	1.059	322.4	0.0	86.6										
43110.0	43176.0	0.548	265.5	-19.8	2.40	0.974	122.4	0.539	0.927	231.8	385.9	0.427	1.426A	4.76	1.854	99.0	221.8	18.4	0.482
		11.89	12.28	24.18	ONE	1.059	322.4	0.0	79.9										
								ARRIVAL DATE = 2443178.0											
43010.0	43178.0	0.367	287.3	-23.2	-0.32	0.796	70.4	0.476	0.745	154.8	413.7	0.390	1.099	7.06	1.763	106.7	192.8	24.3	0.504
		7.72	12.91	20.63	TWO	1.090	328.4	0.0	49.4										
43020.0	43178.0	0.327	292.8	-22.6	-0.34	0.789	74.0	0.451	0.736	158.3	407.6	0.404	1.068	7.12	1.758	104.3	200.9	26.5	0.473
		6.93	12.02	18.95	TWO	1.090	328.4	0.0	57.0										
43030.0	43178.0	0.292	296.5	-22.2	-0.37	0.783	77.6	0.431	0.728	162.6	402.1	0.415	1.042	7.18	1.754	102.4	208.6	28.3	0.452
		6.25	11.42	17.67	TWO	1.090	328.4	0.0	64.0										
43040.0	43178.0	0.261	298.0	-22.2	-0.42	0.778	81.4	0.415	0.722	167.5	397.4	0.422	1.021	7.26	1.751	100.7	215.5	29.7	0.439
		5.71	11.04	16.75	TWO	1.090	328.4	0.0	70.2										
43050.0	43178.0	0.237	296.4	-22.9	-0.49	0.776	85.5	0.403	0.717	173.3	393.4	0.428	1.006	7.37	1.748	99.4	221.4	30.8	0.433
		5.31	10.86	16.16	TWO	1.090	328.4	0.0	75.4										
43060.0	43178.0	0.224	291.1	-24.2	-0.63	0.778	90.1	0.396	0.715	180.1	390.3	0.432	0.999A	7.54	1.747	98.5	225.8	31.7	0.432
		5.10	10.82	15.92	TWO	1.090	328.4	0.0	79.3										
43070.0	43178.0	0.229	282.9	-26.1	-0.92	0.785	95.1	0.395	0.718	187.9	388.1	0.434	1.002A	7.86	1.749	97.9	228.6	32.9	0.436
		5.18	10.96	16.13	TWO	1.090	328.4	0.0	81.8										
43080.0	43178.0	0.259	274.2	-28.8	-1.77	0.801	100.7	0.403	0.729	196.8	387.2	0.435	1.022A	8.74	1.754	97.7	229.3	35.7	0.453
		5.67	11.44	17.11	TWO	1.090	328.4	0.0	82.6										
43100.0	43178.0	0.407	265.6	-19.7	1.87	0.881	114.2	0.461	0.802	218.5	388.7	0.432	1.172A	5.15	1.790	99.0	224.3	20.8	0.448
		8.59	11.29	19.88	ONE	1.090	328.4	0.0	76.8										
43110.0	43178.0	0.536	266.0	-22.0	0.93	0.966	121.9	0.532	0.913	230.8	390.9	0.427	1.400A	6.12	1.832	100.6	218.1	22.5	0.502
		11.60	12.86	24.46	ONE	1.090	328.4	0.0	71.3										
								ARRIVAL DATE = 2443180.0											
43010.0	43180.0	0.378	287.7	-21.7	0.40	0.795	69.5	0.486	0.744	154.4	419.1	0.383	1.105	6.96	1.747	108.5	191.3	21.5	0.547
		7.97	14.17	22.14	TWO	1.120	334.3	0.0	42.0										
43020.0	43180.0	0.336	293.2	-20.8	0.41	0.788	73.3	0.459	0.735	157.9	412.9	0.398	1.073	6.89	1.742	106.0	198.5	23.3	0.507
		7.10	13.00	20.10	TWO	1.120	334.3	0.0	48.9										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
43030.0	43180.0	0.299	297.0	-20.0	0.44	0.782	77.1	0.436	0.728	162.0	407.4	0.410	1.045	6.81	1.738	103.9	205.4	24.8	0.477
		6.38	12.13	18.51	TWO	1.120	334.3	0.0	55.3										
43040.0	43180.0	0.266	298.5	-19.4	0.48	0.778	81.0	0.418	0.721	167.0	402.6	0.420	1.023	6.72	1.735	102.2	211.7	25.8	0.456
		5.79	11.51	17.30	TWO	1.120	334.3	0.0	61.0										
43050.0	43180.0	0.240	297.0	-19.3	0.55	0.775	85.1	0.405	0.717	172.8	398.6	0.426	1.007	6.61	1.732	100.9	217.1	26.4	0.441
		5.35	11.09	16.44	TWO	1.120	334.3	0.0	65.9										
43060.0	43180.0	0.225	291.8	-19.6	0.68	0.777	89.7	0.397	0.715	179.5	395.5	0.431	0.999	6.45	1.731	99.9	221.4	26.3	0.432
		5.12	10.83	15.95	TWO	1.120	334.3	0.0	69.6										
43070.0	43180.0	0.228	283.7	-19.7	0.90	0.784	94.7	0.395	0.718	187.3	393.3	0.434	1.001A	6.18	1.733	99.3	224.1	25.5	0.427
		5.16	10.69	15.86	TWO	1.120	334.3	0.0	71.9										
43080.0	43180.0	0.256	275.2	-19.0	1.43	0.799	100.3	0.402	0.727	196.2	392.3	0.435	1.020A	5.62	1.738	99.1	225.1	23.2	0.426
		5.61	10.66	16.27	TWO	1.120	334.3	0.0	72.4										
43090.0	43180.0	0.316	269.4	-14.1	3.73	0.827	106.6	0.421	0.750	206.2	392.4	0.434	1.065A	3.29	1.750	99.4	224.3	13.6	0.422
		6.71	10.53	17.24	TWO	1.120	334.3	0.0	70.5										
43100.0	43180.0	0.408	266.7	-34.8	-5.75	0.876	113.6	0.458	0.796	217.4	393.5	0.431	1.161A	12.73	1.772	100.4	218.9	43.8	0.555
		8.62	14.39	23.01	ONE	1.120	334.3	0.0	71.9										
43110.0	43180.0	0.524	266.9	-26.0	-1.64	0.955	121.2	0.525	0.897	229.5	395.4	0.426	1.369A	8.58	1.811	102.0	215.1	29.2	0.543
		11.31	14.03	25.34	ONE	1.120	334.3	0.0	64.8										

ARRIVAL DATE = 2443182.0

43010.0	43182.0	0.393	288.1	-20.3	1.09	0.794	68.4	0.498	0.743	154.1	424.5	0.373	1.113	6.93	1.734	110.3	190.7	19.1	0.599
		8.29	15.67	23.97	TWO	1.147	340.0	0.0	35.7										
43020.0	43182.0	0.348	293.7	-19.2	1.11	0.787	72.4	0.468	0.734	157.4	418.1	0.390	1.078	6.74	1.729	107.7	197.2	20.6	0.550
		7.35	14.24	21.59	TWO	1.147	340.0	0.0	41.8										
43030.0	43182.0	0.308	297.7	-18.1	1.16	0.781	76.3	0.444	0.727	161.4	412.5	0.404	1.049	6.54	1.725	105.5	203.4	21.7	0.512
		6.56	13.13	19.69	TWO	1.147	340.0	0.0	47.6										
43040.0	43182.0	0.274	295.3	-17.2	1.25	0.776	80.3	0.424	0.720	166.3	407.6	0.415	1.026	6.32	1.722	103.7	209.1	22.4	0.483
		5.92	12.30	18.22	TWO	1.147	340.0	0.0	52.8										
43050.0	43182.0	0.246	298.0	-16.5	1.40	0.774	84.6	0.409	0.716	172.0	403.6	0.423	1.008	6.05	1.719	102.3	214.1	22.5	0.462
		5.44	11.69	17.13	TWO	1.147	340.0	0.0	57.2										
43060.0	43182.0	0.229	293.2	-16.1	1.64	0.775	89.1	0.400	0.714	178.7	400.4	0.428	0.999	5.69	1.718	101.2	218.1	22.0	0.447
		5.18	11.26	16.44	TWO	1.147	340.0	0.0	60.6										
43070.0	43182.0	0.230	285.3	-15.6	2.07	0.782	94.2	0.397	0.716	186.4	398.2	0.432	1.000A	5.16	1.719	100.6	220.8	20.3	0.438
		5.19	10.99	16.19	TWO	1.147	340.0	0.0	62.7										
43080.0	43182.0	0.256	276.9	-14.3	2.94	0.796	99.8	0.403	0.725	195.2	397.0	0.433	1.017A	4.19	1.724	100.4	221.9	16.6	0.433
		5.62	10.87	16.49	TWO	1.147	340.0	0.0	63.2										
43090.0	43182.0	0.316	271.1	-10.0	5.33	0.823	106.0	0.420	0.745	205.1	397.0	0.432	1.059A	1.71	1.735	100.7	221.4	6.7	0.435
		6.71	10.92	17.63	TWO	1.147	340.0	0.0	61.6										
43110.0	43182.0	0.523	268.8	-35.1	-7.47	0.944	120.5	0.518	0.880	227.8	399.4	0.424	1.335A	14.31	1.793	103.2	211.2	42.5	0.638
		11.29	16.82	28.11	ONE	1.147	340.0	0.0	62.5										

ARRIVAL DATE = 2443184.0

43010.0	43184.0	0.412	288.5	-19.2	1.78	0.792	67.1	0.514	0.742	153.7	429.7	0.360	1.123	6.96	1.724	112.2	190.9	17.1	0.658
		8.70	17.41	26.11	TWO	1.174	345.7	0.0	30.2										
43020.0	43184.0	0.364	294.3	-17.9	1.77	0.785	71.2	0.481	0.733	156.8	423.2	0.381	1.085	6.67	1.719	109.4	196.8	18.3	0.601
		7.66	15.72	23.38	TWO	1.174	345.7	0.0	35.7										
43030.0	43184.0	0.321	298.5	-16.5	1.81	0.779	75.3	0.453	0.725	160.7	417.4	0.396	1.054	6.36	1.715	107.1	202.5	19.1	0.555
		6.80	14.39	21.19	TWO	1.174	345.7	0.0	40.8										
43040.0	43184.0	0.284	300.4	-15.2	1.92	0.774	79.5	0.432	0.719	165.5	412.4	0.409	1.029	6.03	1.711	105.2	207.7	19.5	0.519
		6.10	13.35	19.45	TWO	1.174	345.7	0.0	45.5										
43050.0	43184.0	0.254	299.5	-14.2	2.10	0.772	83.8	0.415	0.714	171.1	408.3	0.418	1.010	5.64	1.709	103.6	212.2	19.4	0.492
		5.57	12.57	18.14	TWO	1.174	345.7	0.0	49.5										
43060.0	43184.0	0.235	295.0	-13.4	2.40	0.773	88.4	0.404	0.712	177.7	405.0	0.424	0.999	5.15	1.707	102.5	215.9	18.4	0.473
		5.26	12.01	17.27	TWO	1.174	345.7	0.0	52.6										
43070.0	43184.0	0.233	287.5	-12.7	2.91	0.779	93.5	0.400	0.713	185.2	402.7	0.428	0.999A	4.47	1.708	101.8	218.5	16.4	0.460
		5.24	11.65	16.89	TWO	1.174	345.7	0.0	54.6										
43080.0	43184.0	0.257	279.1	-11.4	3.83	0.792	99.1	0.404	0.721	193.9	401.4	0.430	1.013A	3.38	1.713	101.6	219.8	12.6	0.455
		5.63	11.50	17.13	TWO	1.174	345.7	0.0	55.1										
43090.0	43184.0	0.313	273.1	-8.5	5.88	0.817	105.3	0.420	0.740	203.7	401.2	0.429	1.051A	1.17	1.723	101.9	219.5	4.3	0.460
		6.65	11.65	18.29	TWO	1.174	345.7	0.0	54.0										
43100.0	43184.0	0.435	272.0	2.0	13.56	0.860	112.2	0.453	0.779	214.4	402.0	0.426	1.132A	-6.67	1.742	102.8	216.7	-22.4	0.518
		9.22	13.33	22.55	TWO	1.174	345.7	0.0	54.4										

ARRIVAL DATE = 2443186.0

43010.0	43186.0	0.435	288.9	-18.2	2.46	0.791	65.5	0.533	0.740	153.4	434.9	0.346	1.134	7.07	1.717	114.3	191.7	15.4	0.725
		9.21	19.37	28.58	TWO	1.198	351.2	0.0	25.4										
43020.0	43186.0	0.382	295.0	-16.7	2.42	0.783	69.9	0.496	0.731	156.2	428.1	0.369	1.094	6.66	1.712	111.2	197.2	16.3	0.659
		8.06	17.42	25.48	TWO	1.198	351.2	0.0	30.3										
43030.0	43186.0	0.336	298.4	-15.2	2.44	0.777	74.2	0.466	0.723	160.0	422.2	0.386	1.060	6.25	1.708	108.7	202.4	16.9	0.605
		7.10	15.86	22.96	TWO	1.198	351.2	0.0	35.0										
43040.0	43186.0	0.296	301.7	-13.6	2.53	0.772	78.4	0.442	0.717	164.6	417.0	0.400	1.033	5.81	1.704	106.6	207.1	17.1	0.563
		6.33	14.63	20.96	TWO	1.198	351.2	0.0	39.2										
43050.0	43186.0	0.264	301.2	-12.3	2.72	0.769	82.9	0.423	0.712	170.0	412.7	0.411	1.013	5.33	1.701	105.0	211.3	16.7	0.531
		5.75	13.69	19.43	TWO	1.198	351.2	0.0	42.9										
43060.0	43186.0	0.242	297.3	-11.2	3.03	0.770	87.5	0.410	0.709	176.5	409.3	0.418	1.000	4.75	1.700	103.8	214.8	15.6	0.507
		5.38	12.99	18.37	TWO	1.198	351.2	0.0	45.7										
43070.0	43186.0	0.237	290.2	-10.4	3.54	0.775	92.6	0.405	0.710	183.9	406.9	0.423	0.998A	3.98	1.700	103.0	217.3	13.5	0.491
		5.31	12.54	17.85	TWO	1.198	351.2	0.0	47.6										
43080.0	43186.0	0.257	281.9	-9.4	4.43	0.787	98.3	0.407	0.717	192.4	405.4	0.425	1.009A	2.86	1.704	102.7	218.6	9.8	0.485
		5.63	12.36	18.00	TWO	1.198	351.2	0.0	48.2										
43090.0	43186.0	0.309	275.4	-7.5	6.17	0.810	104.5	0.421	0.734	201.9	405.0	0.425	1.043A	0.89	1.713	102.9	218.7	3.0	0.491
		6.56	12.54	19.10	TWO	1.198	351.2	0.0	47.5										
43100.0	43186.0	0.406	273.0	-2.2	10.71	0.850	111.4	0.451	0.769	212.5	405.6	0.422	1.116A	-3.86	1.731	103.8	216.9	-12.4	0.528
		8.56	13.61	22.18	TWO	1.198	351.2	0.0	47.0										

ARRIVAL DATE = 2443188.0

43010.0	43188.0	0.462	289.3	-17.4	3.17	0.789	63.6	0.555	0.738	153.1	440.1	0.329	1.148	7.24	1.713	116.5	192.8	14.0	0.800
		9.82	21.57	31.40	TWO	1.221	356.8	0.0	21.2										
43020.0	43188.0	0.405	295.7	-15.8	3.06	0.781	68.3	0.514	0.729	155.7	433.0	0.354	1.105	6.71	1.708	113.2	198.0	14.7	0.724
		8.54	19.34	27.88	TWO	1.221	356.8	0.0	25.6										
43030.0	43188.0	0.355	300.4	-14.0	3.04	0.774	72.7	0.481	0.721	159.2	426.9	0.375	1.068	6.19	1.703	110.4	202.9	15.1	0.663
		7.48	17.54	25.02	TWO	1.221	356.8	0.0	29.9										
43040.0	43188.0	0.312	303.1	-12.3	3.10	0.769	77.2	0.454	0.715	163.5	421.5	0.390	1.039	5.67	1.699	108.2	207.3	15.1	0.614
		6.62	16.11	22.74	TWO	1.221	356.8	0.0	33.8										

DEPART	ARRIVE	SPEED	R A	DECL	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
		DV1	DV2	DVT	LEG	CDIST	RAS	DECLS	LAMDA										
43050.0	43188.0	0.276	303.2	-10.7	3.27	0.766	81.7	0.433	0.709	168.8	417.1	0.402	1.016	5.10	1.696	106.4	211.3	14.5	0.576
		5.97	15.00	20.97	TWO	1.221	356.8	0.0	37.1										
43060.0	43188.0	0.251	295.9	-9.5	3.57	0.766	86.5	0.418	0.706	175.1	413.5	0.411	1.002	4.44	1.694	105.1	214.5	13.4	0.548
		5.53	14.18	19.71	TWO	1.221	356.8	0.0	39.7										
43070.0	43188.0	0.243	293.3	-8.6	4.05	0.770	91.6	0.411	0.707	182.3	410.8	0.416	0.997A	3.63	1.695	104.2	216.9	11.3	0.529
		5.39	13.63	19.02	TWO	1.221	356.8	0.0	41.5										
43080.0	43188.0	0.258	285.1	-7.9	4.87	0.781	97.3	0.411	0.712	190.6	409.2	0.419	1.005A	2.50	1.698	103.8	218.4	7.9	0.521
		5.65	13.39	19.04	TWO	1.221	356.8	0.0	42.2										
43090.0	43188.0	0.304	278.2	-6.7	6.35	0.802	103.5	0.423	0.727	200.0	408.6	0.420	1.035A	0.73	1.706	103.9	218.6	2.3	0.526
		6.47	13.55	20.02	TWO	1.221	356.8	0.0	41.9										
43100.0	43188.0	0.388	274.9	-3.7	9.55	0.839	110.4	0.450	0.758	210.3	408.9	0.417	1.099A	-2.74	1.723	104.7	217.5	-8.2	0.556
		8.18	14.43	22.62	TWO	1.221	356.8	0.0	41.4										
43110.0	43188.0	0.562	277.2	6.1	20.23	0.900	117.9	0.500	0.821	221.3	410.1	0.411	1.232A	-13.69	1.752	106.2	211.8	-34.8	0.699
		12.23	18.59	30.83	TWO	1.221	356.8	0.0	47.7										
ARRIVAL DATE = 2443190.0																			
43010.0	43190.0	0.493	285.6	-16.7	3.93	0.787	61.3	0.581	0.737	153.0	445.5	0.309	1.165	7.50	1.711	119.0	194.3	12.8	0.883
		10.57	24.03	34.60	TWO	1.243	2.3	0.0	17.5										
43020.0	43190.0	0.431	296.3	-15.0	3.72	0.779	66.3	0.536	0.728	155.2	438.0	0.338	1.117	6.82	1.706	115.3	199.3	13.3	0.797
		9.13	21.49	30.62	TWO	1.243	2.3	0.0	21.5										
43030.0	43190.0	0.377	301.5	-13.1	3.63	0.771	71.1	0.499	0.719	158.4	431.5	0.360	1.078	6.20	1.702	112.2	203.9	13.5	0.727
		7.95	19.43	27.38	TWO	1.243	2.3	0.0	25.4										
43040.0	43190.0	0.330	304.7	-11.2	3.65	0.766	75.7	0.469	0.712	162.5	426.0	0.378	1.046	5.58	1.698	109.8	208.2	13.4	0.671
		6.99	17.79	24.77	TWO	1.243	2.3	0.0	28.9										
43050.0	43190.0	0.291	305.3	-9.4	3.78	0.762	80.4	0.445	0.706	167.6	421.3	0.392	1.021	4.93	1.694	107.8	211.9	12.8	0.627
		6.24	16.50	22.74	TWO	1.243	2.3	0.0	32.0										
43060.0	43190.0	0.263	302.8	-8.0	4.04	0.761	85.2	0.428	0.703	173.6	417.5	0.402	1.004	4.21	1.692	106.3	215.0	11.6	0.594
		5.73	15.53	21.26	TWO	1.243	2.3	0.0	34.5										
43070.0	43190.0	0.249	296.8	-7.1	4.48	0.764	90.5	0.418	0.702	180.6	414.6	0.409	0.996A	3.36	1.692	105.3	217.3	9.6	0.572
		5.50	14.88	20.38	TWO	1.243	2.3	0.0	36.2										
43080.0	43190.0	0.259	288.8	-6.5	5.22	0.774	96.1	0.417	0.707	188.7	412.8	0.412	1.001A	2.24	1.695	104.8	218.8	6.6	0.561
		5.67	14.56	20.23	TWO	1.243	2.3	0.0	37.1										
43090.0	43190.0	0.299	281.5	-6.0	6.48	0.793	102.4	0.426	0.720	197.8	411.9	0.413	1.026A	0.62	1.702	104.9	219.3	1.8	0.564
		6.37	14.66	21.04	TWO	1.243	2.3	0.0	37.1										
43100.0	43190.0	0.374	277.4	-4.4	8.90	0.827	109.2	0.450	0.747	207.9	412.0	0.411	1.082A	-2.14	1.717	105.5	218.6	-6.0	0.590
		7.88	15.42	23.30	TWO	1.243	2.3	0.0	36.8										
43110.0	43190.0	0.504	277.4	0.5	14.92	0.883	116.7	0.495	0.802	218.7	412.9	0.405	1.199A	-8.48	1.743	106.9	215.8	-21.5	0.671
		10.83	17.79	28.62	TWO	1.243	2.3	0.0	39.1										
ARRIVAL DATE = 2443192.0																			
43010.0	43192.0	0.530	285.8	-16.1	4.74	0.785	58.7	0.611	0.735	153.1	451.0	0.286	1.184	7.85	1.713	121.7	196.0	11.8	0.977
		11.46	26.79	38.25	TWO	1.263	7.8	0.0	14.3										
43020.0	43192.0	0.462	296.9	-14.4	4.41	0.776	64.1	0.561	0.725	154.8	443.1	0.318	1.133	7.01	1.708	117.6	200.9	12.1	0.879
		9.84	23.89	33.73	TWO	1.263	7.8	0.0	17.8										
43030.0	43192.0	0.403	302.5	-12.4	4.23	0.768	69.1	0.520	0.717	157.6	436.3	0.344	1.090	6.26	1.703	114.2	205.4	12.2	0.799
		8.51	21.55	30.06	TWO	1.263	7.8	0.0	21.3										
43040.0	43192.0	0.352	306.2	-10.3	4.19	0.762	74.0	0.486	0.709	161.4	430.4	0.364	1.054	5.54	1.699	111.5	209.5	12.0	0.735
		7.43	19.66	27.09	TWO	1.263	7.8	0.0	24.6										
43050.0	43192.0	0.309	307.5	-8.4	4.26	0.758	78.8	0.460	0.703	166.2	425.4	0.380	1.026	4.82	1.695	109.3	213.0	11.3	0.684
		6.58	18.17	24.75	TWO	1.263	7.8	0.0	27.5										
43060.0	43192.0	0.276	305.8	-6.8	4.47	0.756	83.8	0.440	0.699	172.0	421.4	0.392	1.007	4.04	1.693	107.7	216.0	10.1	0.646
		5.97	17.05	23.02	TWO	1.263	7.8	0.0	29.9										
43070.0	43192.0	0.258	300.6	-5.7	4.86	0.758	89.1	0.428	0.698	178.8	418.3	0.399	0.996	3.15	1.692	106.5	218.4	8.3	0.619
		5.65	16.26	21.91	TWO	1.263	7.8	0.0	31.6										
43080.0	43192.0	0.262	292.9	-5.3	5.50	0.766	94.8	0.424	0.701	186.6	416.2	0.404	0.998A	2.05	1.694	105.9	219.9	5.5	0.605
		5.71	15.85	21.56	TWO	1.263	7.8	0.0	32.6										
43090.0	43192.0	0.294	285.3	-5.2	6.57	0.783	101.1	0.430	0.712	195.5	415.1	0.406	1.018A	0.55	1.700	105.8	220.6	1.5	0.606
		6.29	15.87	22.16	TWO	1.263	7.8	0.0	32.9										
43100.0	43192.0	0.361	280.3	-4.6	8.49	0.814	108.0	0.450	0.735	205.3	414.9	0.404	1.066A	-1.77	1.713	106.3	220.3	-4.6	0.627
		7.61	16.50	24.10	TWO	1.263	7.8	0.0	32.8										
43110.0	43192.0	0.472	279.1	-2.1	12.50	0.866	115.5	0.490	0.783	215.9	415.6	0.399	1.167A	-6.17	1.737	107.6	218.5	-15.0	0.687
		10.07	18.25	28.32	TWO	1.263	7.8	0.0	33.9										
ARRIVAL DATE = 2443194.0																			
43010.0	43194.0	0.573	289.8	-15.8	5.65	0.783	55.6	0.646	0.733	153.4	456.9	0.260	1.207	8.31	1.718	124.8	197.8	10.9	1.081
		12.52	29.87	42.39	TWO	1.281	13.4	0.0	11.7										
43020.0	43194.0	0.499	297.4	-13.9	5.15	0.774	61.5	0.591	0.723	154.6	448.4	0.296	1.151	7.28	1.713	120.2	202.7	11.2	0.970
		10.69	26.58	37.28	TWO	1.281	13.4	0.0	14.5										
43030.0	43194.0	0.434	303.5	-11.8	4.86	0.765	66.8	0.545	0.714	156.9	441.1	0.325	1.104	6.38	1.707	116.4	207.2	11.2	0.879
		9.19	23.91	33.10	TWO	1.281	13.4	0.0	17.7										
43040.0	43194.0	0.378	307.8	-9.6	4.72	0.758	72.0	0.507	0.706	160.4	434.9	0.348	1.065	5.56	1.703	113.4	211.1	10.8	0.806
		7.97	21.75	29.72	TWO	1.281	13.4	0.0	20.7										
43050.0	43194.0	0.331	309.8	-7.5	4.73	0.753	77.0	0.477	0.700	164.8	429.6	0.366	1.034	4.75	1.699	111.0	214.6	10.1	0.748
		6.99	20.04	27.03	TWO	1.281	13.4	0.0	23.5										
43060.0	43194.0	0.293	308.9	-5.8	4.88	0.751	82.1	0.454	0.695	170.3	425.2	0.379	1.011	3.92	1.696	109.1	217.6	9.0	0.703
		6.27	18.73	25.00	TWO	1.281	13.4	0.0	25.7										
43070.0	43194.0	0.269	304.6	-4.6	5.20	0.752	87.5	0.439	0.693	176.8	421.9	0.389	0.997	2.99	1.695	107.8	219.9	7.2	0.671
		5.85	17.79	23.64	TWO	1.281	13.4	0.0	27.5										
43080.0	43194.0	0.266	297.4	-4.2	5.74	0.758	93.3	0.432	0.695	184.4	419.5	0.395	0.995A	1.90	1.696	107.0	221.6	4.7	0.653
		5.79	17.25	23.04	TWO	1.281	13.4	0.0	28.6										
43090.0	43194.0	0.291	289.5	-4.4	6.65	0.773	99.6	0.436	0.704	192.9	418.1	0.397	1.010A	0.49	1.701	106.7	222.4	1.2	0.650
		6.23	17.16	23.39	TWO	1.281	13.4	0.0	29.1										
43100.0	43194.0	0.349	283.8	-4.5	8.19	0.801	106.6	0.452	0.723	202.5	417.7	0.396	1.051A	-1.52	1.713	107.1	222.3	-3.7	0.667
		7.36	17.66	25.02	TWO	1.281	13.4	0.0	29.2										
43110.0	43194.0	0.447	281.6	-3.5	11.10	0.848	114.1	0.487	0.764	212.9	418.1	0.392	1.137A	-4.88	1.734	108.2	221.2	-11.3	0.715
		9.49	19.07	28.56	TWO	1.281	13.4	0.0	29.9										
ARRIVAL DATE = 2443196.0																			
43020.0	43196.0	0.541	297.7	-13.6	5.97	0.771	58.4	0.625	0.721	154.6	454.0	0.271	1.172	7.64	1.720	123.1	204.7	10.3	1.072
		11.71	29.60	41.31	TWO	1.298	19.0	0.0	11.8										
43030.0	43196.0	0.470	304.3	-11.4	5.52	0.762	64.2	0.574	0.712	156.4	446.2	0.303	1.120	6.58	1.715	118.9	209.2	10.2	0.969
		10.01	26.55	36.56	TWO	1.298	19.0	0.0	14.4										
43040.0	43196.0	0.408	305.2	-9.1	5.28	0.754	69.6	0.531	0.703	159.4	439.5	0.330	1.077	5.63	1.710	115.5	213.1	9.9	0.885
		8.62	24.08	32.70	TWO	1.298	19.0	0.0	17.2										

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EARTH-MERCURY

DEPART	ARRIVE	SPEED	R A	DECL	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
		DV1	DV2	DVT	LEG	CDIST	RAS	DECLS	LAMDA										
43050.0	43196.0	0.356	312.0	-6.9	5.20	0.748	74.9	0.497	0.696	163.5	433.8	0.350	1.043	4.73	1.706	112.8	216.6	9.1	0.818
		7.50	22.11	29.61	TWO	1.298	19.0	0.0	19.8										
43060.0	43196.0	0.313	312.1	-5.0	5.27	0.745	80.2	0.471	0.691	168.6	429.2	0.365	1.016	3.83	1.702	110.7	219.5	8.0	0.766
		6.65	20.58	27.23	TWO	1.298	19.0	0.0	22.0										
43070.0	43196.0	0.284	308.8	-3.6	5.51	0.744	85.7	0.453	0.688	174.8	425.5	0.376	0.999	2.88	1.701	109.1	221.9	6.4	0.728
		6.10	19.47	25.57	TWO	1.298	19.0	0.0	23.7										
43080.0	43196.0	0.273	302.3	-3.2	5.96	0.749	91.6	0.443	0.689	182.0	422.8	0.384	0.994A	1.79	1.701	108.1	223.6	4.1	0.705
		5.91	18.78	24.69	TWO	1.298	19.0	0.0	24.9										
43090.0	43196.0	0.289	294.3	-3.6	6.71	0.762	98.0	0.443	0.695	190.3	421.1	0.387	1.003A	0.45	1.705	107.7	224.6	1.1	0.697
		6.20	18.55	24.75	TWO	1.298	19.0	0.0	25.6										
43100.0	43196.0	0.339	287.8	-4.2	7.96	0.786	105.0	0.456	0.712	199.5	420.4	0.387	1.036A	-1.34	1.715	107.9	224.8	-3.1	0.709
		7.15	18.90	26.05	TWO	1.298	19.0	0.0	26.0										
43110.0	43196.0	0.425	284.5	-4.1	10.17	0.829	112.6	0.486	0.746	209.7	420.5	0.384	1.109A	-4.05	1.734	108.8	224.1	-8.9	0.749
		9.00	20.06	29.06	TWO	1.298	19.0	0.0	26.5										
ARRIVAL DATE = 2443198.0																			
43020.0	43198.0	0.589	297.9	-13.5	6.90	0.769	54.9	0.663	0.719	155.0	460.1	0.242	1.197	8.14	1.731	126.4	206.8	9.6	1.187
		12.92	33.01	45.93	TWO	1.313	24.7	0.0	9.8										
43030.0	43198.0	0.511	305.1	-11.2	6.25	0.759	61.1	0.607	0.709	156.2	451.6	0.279	1.140	6.86	1.725	121.7	211.3	9.4	1.069
		10.99	29.53	40.51	TWO	1.313	24.7	0.0	11.5										
43040.0	43198.0	0.443	310.6	-8.8	5.86	0.750	66.9	0.560	0.700	158.6	444.4	0.308	1.092	5.76	1.720	117.9	215.3	9.0	0.973
		9.40	26.69	36.10	TWO	1.313	24.7	0.0	13.9										
43050.0	43198.0	0.385	314.1	-6.4	5.67	0.743	72.5	0.522	0.693	162.2	438.3	0.331	1.054	4.76	1.716	114.8	218.8	8.3	0.897
		8.12	24.42	32.54	TWO	1.313	24.7	0.0	16.3										
43060.0	43198.0	0.337	315.1	-4.3	5.65	0.739	78.0	0.491	0.686	166.9	433.2	0.349	1.024	3.79	1.712	112.4	221.8	7.2	0.836
		7.12	22.64	29.76	TWO	1.313	24.7	0.0	18.5										
43070.0	43198.0	0.301	313.0	-2.8	5.80	0.737	83.6	0.469	0.683	172.7	429.1	0.362	1.003	2.79	1.709	110.6	224.2	5.7	0.791
		6.42	21.32	27.74	TWO	1.313	24.7	0.0	20.3										
43080.0	43198.0	0.283	307.4	-2.2	6.15	0.740	89.6	0.456	0.682	179.6	426.1	0.371	0.993	1.70	1.709	109.4	226.0	3.6	0.762
		6.09	20.44	26.53	TWO	1.313	24.7	0.0	21.6										
43090.0	43198.0	0.290	299.6	-2.7	6.76	0.750	96.1	0.453	0.687	187.5	424.0	0.376	0.998A	0.42	1.712	108.8	227.1	0.9	0.748
		6.21	20.05	26.27	TWO	1.313	24.7	0.0	22.5										
43100.0	43198.0	0.330	292.4	-3.7	7.78	0.772	103.2	0.461	0.700	196.5	423.0	0.377	1.023A	-1.20	1.720	108.8	227.6	-2.6	0.755
		6.97	20.24	27.20	TWO	1.313	24.7	0.0	23.0										
43110.0	43198.0	0.406	288.1	-4.4	9.49	0.810	110.9	0.486	0.729	206.3	422.9	0.375	1.083A	-3.49	1.736	109.5	227.2	-7.3	0.786
		8.56	21.17	29.74	TWO	1.313	24.7	0.0	23.6										
ARRIVAL DATE = 2443200.0																			
43030.0	43200.0	0.559	305.6	-11.1	7.06	0.756	57.6	0.645	0.707	156.2	457.5	0.251	1.163	7.25	1.739	124.9	213.6	8.7	1.183
		12.16	32.88	45.04	TWO	1.327	30.5	0.0	9.3										
43040.0	43200.0	0.484	311.7	-8.6	6.49	0.746	63.8	0.593	0.697	158.0	449.6	0.284	1.111	5.96	1.734	120.6	217.7	8.3	1.073
		10.35	29.63	39.98	TWO	1.327	30.5	0.0	11.0										
43050.0	43200.0	0.420	316.1	-6.1	6.16	0.738	69.7	0.550	0.689	161.1	443.0	0.310	1.068	4.84	1.729	117.1	221.3	7.6	0.984
		8.87	27.01	35.88	TWO	1.327	30.5	0.0	13.1										
43060.0	43200.0	0.366	318.0	-3.9	6.04	0.732	75.4	0.515	0.682	165.3	437.4	0.331	1.033	3.79	1.724	114.3	224.3	6.5	0.914
		7.70	24.93	32.63	TWO	1.327	30.5	0.0	15.2										
43070.0	43200.0	0.323	317.0	-2.1	6.09	0.729	81.3	0.489	0.677	170.7	432.9	0.346	1.009	2.74	1.721	112.2	226.8	5.1	0.861
		6.84	23.36	30.20	TWO	1.327	30.5	0.0	17.0										
43080.0	43200.0	0.297	312.6	-1.3	6.33	0.730	87.4	0.472	0.676	177.1	429.4	0.357	0.994	1.64	1.720	110.8	228.7	3.2	0.824
		6.34	22.27	28.61	TWO	1.327	30.5	0.0	18.4										
43090.0	43200.0	0.294	305.3	-1.7	6.81	0.738	94.0	0.464	0.678	184.7	427.0	0.363	0.994A	0.39	1.722	109.9	230.0	0.8	0.804
		6.29	21.69	27.97	TWO	1.327	30.5	0.0	19.5										
43100.0	43200.0	0.323	297.6	-2.9	7.62	0.756	101.2	0.469	0.689	193.3	425.7	0.366	1.012A	-1.10	1.729	109.7	230.6	-2.2	0.804
		6.83	21.68	28.51	TWO	1.327	30.5	0.0	20.2										
43110.0	43200.0	0.388	292.2	-4.2	8.97	0.790	109.0	0.488	0.713	202.8	425.2	0.365	1.060A	-3.08	1.742	110.2	230.5	-6.1	0.828
		8.18	22.39	30.57	TWO	1.327	30.5	0.0	20.9										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
									ARRIVAL DATE = 2443500.0										
43360.0	43500.0	0.525	267.8	-13.0	8.60	0.731	60.2	0.637	0.696	158.5	301.5	0.253D	1.139	-11.64	2.238	67.8	194.4	-23.7	1.042
		11.34	28.71	40.05	ONE	0.677	198.5	0.0	156.0										
43370.0	43500.0	0.514	274.3	-14.8	7.12	0.704	61.6	0.646	0.676	161.0	294.6	0.239D	1.113	-9.67	2.229	65.1	196.8	-18.0	1.098
		11.06	30.39	41.45	ONE	0.677	198.5	0.0	161.9										
43380.0	43500.0	0.504	280.2	-15.6	6.22	0.675	63.4	0.658	0.657	163.7	287.7	0.225D	1.089	-8.24	2.219	62.4	199.3	-14.0	1.168
		10.83	32.47	43.30	ONE	0.677	198.5	0.0	166.0										
43390.0	43500.0	0.496	285.3	-16.0	5.66	0.643	65.9	0.671	0.637	166.6	281.0	0.209D	1.064	-7.09	2.208	59.7	201.8	-10.9	1.245
		10.64	34.75	45.38	ONE	0.677	198.5	0.0	168.6										
43400.0	43500.0	0.490	285.4	-16.0	5.33	0.607	69.2	0.687	0.618	169.7	274.4	0.194D	1.042	-6.11	2.197	57.0	204.2	-8.5	1.326
		10.48	37.15	47.62	ONE	0.677	198.5	0.0	169.8										
43410.0	43500.0	0.486	292.0	-16.0	5.17	0.570	74.0	0.704	0.599	172.9	267.9	0.177D	1.021	-5.20	2.186	54.2	206.6	-6.5	1.410
		10.39	39.62	50.01	ONE	0.677	198.5	0.0	169.6										
43420.0	43500.0	0.488	292.8	-16.1	5.17	0.534	80.9	0.724	0.583	176.5	261.7	0.161D	1.005	-4.31	2.175	51.3	208.9	-4.9	1.496
		10.43	42.17	52.61	ONE	0.677	198.5	0.0	168.5										
43430.0	43500.0	0.502	291.4	-16.6	5.33	0.505	91.2	0.746	0.571	180.4	255.8	0.145D	0.998A	-3.40	2.167	48.5	211.0	-3.5	1.584
		10.78	44.81	55.59	ONE	0.677	198.5	0.0	167.0										
43440.0	43500.0	0.541	287.7	-17.4	5.67	0.500	105.8	0.772	0.568	184.8	250.3	0.130D	1.007A	-2.39	2.165	45.5	213.0	-2.2	1.679
		11.73	47.60	59.34	ONE	0.677	198.5	0.0	165.4										
									ARRIVAL DATE = 2443502.0										
43360.0	43502.0	0.522	267.2	-5.1	14.43	0.742	62.4	0.607	0.704	157.8	312.8	0.277D	1.131	-16.66	2.220	72.5	204.3	-35.7	1.041
		11.26	28.70	39.95	ONE	0.687	210.8	0.0	143.8										
43370.0	43502.0	0.493	273.9	-9.2	10.75	0.718	64.1	0.612	0.686	160.4	306.0	0.266D	1.105	-12.45	2.211	70.0	204.9	-25.6	1.036
		10.57	28.54	39.11	ONE	0.687	210.8	0.0	153.8										
43380.0	43502.0	0.475	279.8	-11.4	8.74	0.693	66.3	0.620	0.667	163.2	299.4	0.254D	1.081	-9.87	2.202	67.5	206.7	-18.9	1.076
		10.13	29.73	39.87	ONE	0.687	210.8	0.0	160.7										
43390.0	43502.0	0.460	284.7	-12.5	7.54	0.665	69.0	0.629	0.649	166.3	292.8	0.241D	1.058	-8.05	2.193	65.0	209.0	-14.2	1.135
		9.80	31.46	41.26	ONE	0.687	210.8	0.0	165.7										
43400.0	43502.0	0.449	288.4	-13.1	6.79	0.636	72.5	0.641	0.631	169.5	286.4	0.227D	1.036	-6.63	2.183	62.5	211.2	-10.7	1.201
		9.52	33.43	42.96	ONE	0.687	210.8	0.0	169.3										
43410.0	43502.0	0.440	290.6	-13.5	6.33	0.606	77.3	0.654	0.615	173.1	280.3	0.213D	1.017	-5.42	2.173	60.0	213.4	-8.0	1.272
		9.33	35.52	44.85	ONE	0.687	210.8	0.0	171.5										
43420.0	43502.0	0.438	290.7	-14.0	6.10	0.579	84.0	0.670	0.601	177.0	274.5	0.199D	1.003	-4.34	2.164	57.6	215.5	-5.9	1.344
		9.29	37.67	46.96	ONE	0.687	210.8	0.0	172.4										
43430.0	43502.0	0.450	288.4	-14.8	6.05	0.561	93.2	0.688	0.591	181.5	269.1	0.185D	0.998A	-3.29	2.158	55.2	217.4	-4.1	1.418
		9.55	39.86	49.42	ONE	0.687	210.8	0.0	172.2										
43440.0	43502.0	0.487	283.8	-15.9	6.19	0.566	105.6	0.710	0.591	186.7	264.5	0.172D	1.011A	-2.23	2.158	52.8	219.0	-2.6	1.494
		10.42	42.12	52.54	ONE	0.687	210.8	0.0	171.4										
43450.0	43502.0	0.570	277.7	-17.2	6.53	0.620	120.9	0.738	0.613	193.1	261.0	0.160D	1.065A	-1.07	2.172	50.5	220.2	-1.1	1.576
		12.45	44.56	57.01	ONE	0.687	210.8	0.0	170.5										
									ARRIVAL DATE = 2443504.0										
43370.0	43504.0	0.503	272.3	-0.2	17.27	0.731	66.3	0.582	0.694	160.0	317.1	0.290D	1.098	-18.20	2.184	74.5	215.0	-38.7	1.051
		10.81	29.00	39.81	ONE	0.707	222.6	0.0	140.7										
43380.0	43504.0	0.461	278.6	-5.1	12.52	0.708	68.7	0.586	0.677	162.9	310.7	0.281D	1.074	-12.86	2.176	72.2	214.4	-27.0	1.014
		9.81	27.90	37.71	ONE	0.707	222.6	0.0	151.8										
43390.0	43504.0	0.435	283.5	-7.7	10.01	0.685	71.6	0.591	0.661	166.1	304.4	0.270D	1.051	-9.72	2.167	69.9	215.9	-19.3	1.038
		9.21	28.61	37.83	ONE	0.707	222.6	0.0	159.6										
43400.0	43504.0	0.416	287.0	-9.3	8.52	0.661	75.3	0.599	0.645	169.6	298.3	0.259D	1.030	-7.57	2.159	67.7	217.8	-14.0	1.085
		8.80	29.98	38.78	ONE	0.707	222.6	0.0	165.2										
43410.0	43504.0	0.403	292.6	-10.4	7.60	0.637	80.1	0.608	0.630	173.5	292.5	0.247D	1.013	-5.92	2.150	65.5	219.8	-10.2	1.140
		8.51	31.62	40.12	ONE	0.707	222.6	0.0	169.4										
43420.0	43504.0	0.398	287.9	-11.4	7.04	0.618	86.5	0.620	0.618	177.9	287.1	0.235D	1.002	-4.56	2.143	63.4	221.7	-7.3	1.198
		8.40	33.35	41.75	ONE	0.707	222.6	0.0	172.6										
43430.0	43504.0	0.408	284.7	-12.7	6.74	0.609	95.0	0.634	0.612	182.9	282.4	0.224D	1.000A	-3.33	2.139	61.4	223.3	-5.0	1.257
		8.61	35.11	43.72	ONE	0.707	222.6	0.0	175.0										
43440.0	43504.0	0.445	279.2	-14.2	6.64	0.622	106.0	0.653	0.616	189.0	278.6	0.214D	1.018A	-2.17	2.142	59.5	224.6	-3.0	1.317
		9.45	36.87	46.32	ONE	0.707	222.6	0.0	176.4										
43450.0	43504.0	0.530	272.7	-15.8	6.75	0.679	119.2	0.680	0.643	196.7	276.4	0.206D	1.080A	-1.01	2.158	57.9	225.3	-1.3	1.378
		11.44	38.69	50.13	ONE	0.707	222.6	0.0	177.0										
									ARRIVAL DATE = 2443506.0										
43380.0	43506.0	0.484	276.1	4.6	19.38	0.722	70.7	0.556	0.686	162.8	321.4	0.305D	1.067	-19.01	2.143	76.4	224.5	-40.8	1.038
		10.34	28.62	38.96	ONE	0.737	233.9	0.0	138.3										
43390.0	43506.0	0.427	281.6	-1.0	13.72	0.702	73.9	0.558	0.671	166.2	315.6	0.297D	1.045	-12.74	2.135	74.4	222.9	-27.7	0.975
		9.04	26.73	35.77	ONE	0.737	233.9	0.0	150.3										
43400.0	43506.0	0.396	285.0	-4.2	10.81	0.682	77.7	0.562	0.657	170.0	309.8	0.288D	1.026	-9.18	2.127	72.4	224.0	-19.2	0.985
		8.34	27.02	35.37	ONE	0.737	233.9	0.0	158.5										
43410.0	43506.0	0.376	286.1	-6.4	9.12	0.664	82.5	0.567	0.644	174.2	304.4	0.279D	1.010	-6.79	2.120	70.5	225.6	-13.4	1.019
		7.92	28.05	35.96	ONE	0.737	233.9	0.0	164.3										
43420.0	43506.0	0.367	284.6	-8.3	8.07	0.652	88.7	0.576	0.635	179.1	299.6	0.269D	1.001	-4.99	2.115	68.7	227.2	-9.3	1.062
		7.74	29.32	37.06	ONE	0.737	233.9	0.0	168.6										
43430.0	43506.0	0.377	280.5	-10.3	7.43	0.650	96.7	0.587	0.632	184.7	295.5	0.261D	1.002A	-3.52	2.113	67.1	228.6	-6.2	1.107
		7.93	30.65	38.59	ONE	0.737	233.9	0.0	171.9										
43440.0	43506.0	0.416	274.3	-12.4	7.08	0.669	106.6	0.603	0.640	191.7	292.6	0.254D	1.026A	-2.21	2.118	65.7	229.6	-3.7	1.151
		8.78	31.96	40.74	ONE	0.737	233.9	0.0	174.3										
43450.0	43506.0	0.503	267.8	-14.5	6.95	0.730	118.3	0.630	0.675	200.5	291.5	0.250D	1.099A	-0.99	2.137	64.5	229.7	-1.6	1.195
		10.79	33.25	44.04	ONE	0.737	233.9	0.0	175.5										
									ARRIVAL DATE = 2443508.0										
43390.0	43508.0	0.460	278.5	8.7	20.45	0.716	75.7	0.529	0.680	166.5	326.1	0.321D	1.040	-18.83	2.098	78.4	232.3	-41.7	0.996
		9.79	27.37	37.16	ONE	0.772	244.6	0.0	136.8										
43400.0	43508.0	0.394	282.4	2.6	14.23	0.700	79.7	0.530	0.668	170.5	320.9	0.314D	1.021	-11.99	2.091	76.7	230.1	-27.5	0.916
		8.29	25.01	33.30	ONE	0.772	244.6	0.0	149.2										
43410.0	43508.0	0.360	283.3	-1.4	11.10	0.687	84.5	0.532	0.657	175.1	315.9	0.307D	1.007	-8.21	2.086	75.0	230.8	-18.3	0.916
		7.59	24.99	32.59	ONE	0.772	244.6	0.0	157.2										
43420.0	43508.0	0.347	281.1	-4.5	9.30	0.680	90.6	0.538	0.651	180.5	311.6	0.301D	1.000A	-5.71	2.082	73.5	232.1	-12.2	0.940
		7.31	25.69	33.00	ONE	0.772	244.6	0.0	162.6										
43430.0	43508.0	0.355	276.2	-7.5	8.19	0.684	98.1	0.547	0.650	186.8	308.2	0.295D	1.006A	-3.85	2.082	72.2	233.2	-7.9	0.970
		7.48	26.59	34.07	ONE	0.772	244.6	0.0	166.2										
43440.0	43508.0	0.396	269.5	-10.5	7.52	0.709	107.3	0.562	0.663	194.6	306.1	0.290D	1.036A	-2.34	2.089	71.2	233.7	-4.6	1.000
		8.36	27.49	35.85	ONE	0.772	244.6	0.0	168.2										
43450.0	43508.0	0.486	263.2	-13.2	7.14	0.773	117.9	0.590	0.705	204.5	306.2	0.289D	1.121A	-1.01	2.110	70.5	233.2	-2.0	1.029
		10.40	28.33	38.73	ONE	0.772	244.6	0.0	168.5										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2443510.0											
43360.0	43510.C	0.484	262.7	-53.0	-19.43	0.772	68.8	0.517	0.727	156.7	357.6	0.351D	1.103	19.89	2.077	89.2	222.7	59.4	0.821
		10.35	22.20	32.55	TWO	0.812	254.6	0.0	115.6										
43400.0	43510.0	0.430	279.1	11.7	20.31	0.716	81.3	0.503	0.678	171.2	331.2	0.337D	1.018	-17.53	2.053	80.5	238.0	-41.3	0.924
		9.10	25.24	34.35	ONE	0.812	254.6	0.0	136.1										
43410.0	43510.0	0.362	280.3	5.1	14.01	0.706	86.1	0.503	0.669	176.2	326.9	0.332D	1.006	-10.63	2.048	79.1	235.7	-26.2	0.841
		7.63	22.79	30.42	ONE	0.812	254.6	0.0	148.1										
43420.0	43510.C	0.337	277.7	-0.0	10.88	0.703	92.1	0.507	0.664	182.0	323.1	0.328D	1.001A	-6.86	2.046	77.8	236.1	-16.6	0.834
		7.11	22.58	29.70	ONE	0.812	254.6	0.0	155.4										
43430.0	43510.0	0.343	272.1	-4.5	9.09	0.712	99.3	0.514	0.667	189.0	320.4	0.324D	1.010A	-4.38	2.047	76.8	236.8	-10.4	0.848
		7.23	22.98	30.21	ONE	0.812	254.6	0.0	159.5										
43440.0	43510.0	0.385	265.2	-8.6	8.00	0.741	107.9	0.530	0.684	197.6	319.1	0.322D	1.047A	-2.55	2.056	76.1	236.9	-5.9	0.865
		8.12	23.50	31.62	ONE	0.812	254.6	0.0	161.4										
43450.0	43510.C	0.478	259.3	-12.1	7.33	0.807	117.7	0.561	0.733	208.4	320.0	0.322D	1.144A	-1.06	2.080	75.9	235.8	-2.4	0.882
		10.19	23.99	34.18	ONE	0.812	254.6	0.0	161.0										
								ARRIVAL DATE = 2443512.0											
43360.0	43512.C	0.426	266.C	-46.0	-13.02	0.776	69.6	0.504	0.731	156.6	366.5	0.362	1.099	14.08	2.035	92.2	215.2	51.6	0.631
		9.01	16.62	25.63	TWO	0.853	264.0	0.0	114.1										
43370.0	43512.C	0.448	270.6	-54.6	-18.57	0.763	72.4	0.495	0.718	159.9	360.5	0.363	1.073	20.20	2.029	90.2	229.5	60.2	0.807
		9.51	21.78	31.29	TWO	0.853	264.0	0.0	114.1										
43380.0	43512.C	0.584	267.8	-66.1	-32.97	0.750	75.5	0.487	0.706	163.6	355.5	0.363D	1.050	35.15	2.024	88.5	267.5	71.5	1.228
		12.78	34.23	47.01	TWO	0.853	264.0	0.0	108.4										
43400.0	43512.C	0.586	274.4	21.4	34.82	0.728	82.5	0.481	0.686	171.8	340.4	0.356D	1.016	-31.55	2.013	83.7	261.2	-61.9	1.186
		12.83	33.00	45.83	ONE	0.853	264.0	0.0	118.0										
43410.0	43512.C	0.396	277.3	13.2	19.04	0.722	87.5	0.479	0.679	177.2	337.1	0.354D	1.004	-15.21	2.009	82.6	241.5	-39.1	0.828
		8.35	22.40	30.76	ONE	0.853	264.0	0.0	135.8										
43420.0	43512.C	0.341	274.6	5.4	13.15	0.722	93.3	0.481	0.677	183.6	334.0	0.351D	1.002A	-8.74	2.008	81.6	239.5	-23.6	0.754
		7.19	20.21	27.40	ONE	0.853	264.0	0.0	146.5										
43430.0	43512.0	0.338	268.6	-1.2	10.22	0.734	100.2	0.489	0.682	191.1	331.9	0.349D	1.015A	-5.20	2.011	80.8	239.4	-14.0	0.743
		7.14	19.90	27.04	ONE	0.853	264.0	0.0	151.9										
43440.0	43512.0	0.380	261.6	-6.7	8.55	0.767	108.4	0.505	0.703	200.3	331.3	0.348D	1.058A	-2.88	2.022	80.5	239.0	-7.7	0.748
		8.01	20.04	28.05	ONE	0.853	264.0	0.0	153.9										
43450.0	43512.C	0.474	256.2	-11.0	7.53	0.834	117.7	0.539	0.758	211.8	332.8	0.349D	1.166A	-1.16	2.047	80.6	237.1	-3.1	0.755
		10.10	20.24	30.34	ONE	0.853	264.0	0.0	152.9										
								ARRIVAL DATE = 2443514.0											
43360.0	43514.C	0.398	267.3	-41.3	-9.58	0.780	70.2	0.495	0.733	156.6	375.1	0.370	1.096	11.23	1.994	95.0	209.8	46.9	0.530
		8.39	13.66	22.05	TWO	0.895	272.8	0.0	108.0										
43370.0	43514.C	0.390	273.1	-47.1	-12.31	0.768	73.1	0.483	0.722	159.9	369.0	0.373	1.071	14.50	1.989	92.9	221.3	52.7	0.625
		8.21	16.45	24.66	TWO	0.895	272.8	0.0	112.2										
43380.0	43514.C	0.414	276.7	-56.3	-17.83	0.756	76.3	0.473	0.711	163.7	363.5	0.374	1.047	20.55	1.983	91.1	235.1	61.5	0.792
		8.74	21.33	30.07	TWO	0.895	272.8	0.0	112.2										
43390.0	43514.C	0.567	273.1	-68.3	-33.00	0.746	80.0	0.466	0.701	168.1	359.1	0.375D	1.027	36.22	1.978	89.7	277.7	73.4	1.220
		12.37	33.99	46.36	TWO	0.895	272.8	0.0	106.6										
43410.0	43514.C	0.521	274.4	22.1	30.36	0.734	88.5	0.460	0.687	178.2	346.4	0.371D	1.004	-26.13	1.971	85.7	256.8	-59.8	1.002
		11.22	27.53	38.75	ONE	0.895	272.8	0.0	118.9										
43420.0	43514.0	0.367	272.2	12.2	16.89	0.737	94.2	0.461	0.687	185.0	344.1	0.370D	1.004A	-12.14	1.971	85.0	242.8	-35.1	0.718
		7.73	19.17	26.90	ONE	0.895	272.8	0.0	135.1										
43430.0	43514.C	0.342	265.9	2.8	11.79	0.752	101.0	0.469	0.695	193.0	342.6	0.369D	1.020A	-6.50	1.975	84.5	241.0	-19.7	0.660
		7.22	17.46	24.68	ONE	0.895	272.8	0.0	143.1										
43440.0	43514.0	0.380	258.9	-4.7	9.23	0.787	108.9	0.487	0.719	202.8	342.5	0.369D	1.068A	-3.37	1.987	84.3	239.8	-10.3	0.648
		8.00	17.12	25.12	ONE	0.895	272.8	0.0	145.5										
43450.0	43514.C	0.472	253.9	-10.0	7.76	0.855	117.7	0.525	0.778	214.6	344.5	0.370D	1.186A	-1.29	2.014	84.7	237.0	-4.0	0.648
		10.07	17.11	27.18	ONE	0.895	272.8	0.0	144.0										
								ARRIVAL DATE = 2443516.0											
43360.0	43516.C	0.382	268.0	-37.8	-7.37	0.782	70.5	0.489	0.735	156.5	383.2	0.376	1.095	9.60	1.955	97.6	203.7	43.4	0.470
		8.05	11.93	19.97	TWO	0.937	281.1	0.0	99.1										
43370.0	43516.0	0.362	273.9	-41.8	-8.88	0.771	73.6	0.475	0.725	159.9	377.1	0.381	1.069	11.62	1.949	95.5	215.3	47.8	0.528
		7.62	13.60	21.22	TWO	0.937	281.1	0.0	106.0										
43380.0	43516.C	0.354	278.2	-48.1	-11.57	0.761	76.9	0.463	0.714	163.8	371.5	0.384	1.045	14.80	1.944	93.6	225.9	53.7	0.615
		7.46	16.15	23.61	TWO	0.937	281.1	0.0	109.7										
43390.0	43516.C	0.383	280.1	-58.3	-17.26	0.752	80.6	0.454	0.706	168.4	366.7	0.385	1.026	20.95	1.940	92.1	239.3	63.2	0.777
		8.08	20.89	28.96	TWO	0.937	281.1	0.0	109.6										
43400.0	43516.C	0.574	275.0	-70.6	-34.48	0.746	84.9	0.448	0.698	173.7	363.1	0.386	1.011	38.64	1.936	91.0	293.4	75.8	1.247
		12.53	34.79	47.32	TWO	0.937	281.1	0.0	103.9										
43420.0	43516.C	0.451	271.1	20.4	24.71	0.749	95.0	0.446	0.695	186.2	353.3	0.385D	1.005A	-19.64	1.934	87.9	249.8	-54.2	0.801
		9.57	21.61	31.18	ONE	0.937	281.1	0.0	120.0										
43430.0	43516.C	0.359	264.2	7.7	14.27	0.766	101.6	0.454	0.705	194.7	352.4	0.385D	1.025A	-8.72	1.940	87.6	241.7	-28.9	0.608
		7.56	15.94	23.50	ONE	0.937	281.1	0.0	132.5										
43440.0	43516.0	0.383	257.0	-2.4	10.15	0.802	109.2	0.473	0.731	204.8	352.8	0.385D	1.077A	-4.11	1.953	87.7	239.1	-14.2	0.569
		8.06	14.80	22.86	ONE	0.937	281.1	0.0	136.1										
43450.0	43516.C	0.472	252.3	-9.1	8.04	0.869	117.6	0.514	0.793	216.8	355.0	0.386D	1.201A	-1.48	1.980	88.3	235.3	-5.2	0.562
		10.06	14.60	24.65	ONE	0.937	281.1	0.0	134.0										
								ARRIVAL DATE = 2443518.0											
43360.0	43518.C	0.373	268.5	-34.9	-5.77	0.784	70.7	0.486	0.737	156.4	390.8	0.379	1.095	8.58	1.918	100.0	196.9	40.0	0.438
		7.86	11.00	18.86	TWO	0.977	289.0	0.0	88.4										
43370.0	43518.C	0.346	274.2	-37.8	-6.65	0.773	73.9	0.469	0.727	159.9	384.7	0.386	1.068	9.94	1.913	97.8	208.9	44.0	0.471
		7.31	11.95	19.26	TWO	0.977	289.0	0.0	97.1										
43380.0	43518.C	0.326	278.5	-42.1	-8.13	0.764	77.3	0.456	0.717	163.9	379.2	0.390	1.044	11.86	1.908	96.0	219.3	48.4	0.521
		6.90	13.41	20.31	TWO	0.977	289.0	0.0	103.3										
43390.0	43518.C	0.321	280.6	-49.1	-10.83	0.757	81.1	0.445	0.709	168.6	374.4	0.393	1.025	14.98	1.904	94.4	228.9	54.7	0.601
		6.80	15.73	22.53	TWO	0.977	289.0	0.0	106.7										
43400.0	43518.C	0.360	279.3	-60.4	-16.89	0.752	85.4	0.438	0.703	174.0	370.3	0.395	1.010	21.45	1.900	93.1	241.6	65.4	0.763
		7.59	20.49	28.08	TWO	0.977	289.0	0.0	106.4										
43430.0	43518.C	0.403	264.2	14.4	18.98	0.776	102.0	0.443	0.713	196.0	361.4	0.397	1.028A	-13.20	1.906	90.4	242.3	-44.4	0.622
		8.51	16.33	24.84	ONE	0.977	289.0	0.0	119.4										
43440.0	43518.C	0.390	256.1	0.4	11.52	0.812	109.4	0.464	0.740	206.3	362.1	0.397	1.084A	-5.32	1.919	90.7	237.1	-20.3	0.513
		8.22	13.16	21.38	ONE	0.977	289.0	0.0	125.4										
43450.0	43518.0	0.472	251.3	-8.2	8.40	0.879	117.5	0.507	0.804	218.3	364.3	0.397	1.212A	-1.77	1.947	91.5	232.1	-7.0	0.497
		10.05	12.70	22.76	ONE	0.977	289.0	0.0	122.9										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
									ARRIVAL DATE = 2443520.0										
43360.0	43520.0	0.370	268.9	-32.5	-4.52	0.785	70.6	0.485	0.738	156.3	398.0	0.380	1.095	7.91	1.883	102.2	190.3	36.4	0.427
		7.79	10.70	18.49	TWO	1.016	296.4	0.0	77.2										
43370.0	43520.0	0.338	274.5	-34.5	-5.04	0.775	74.0	0.467	0.728	159.8	392.0	0.388	1.067	8.87	1.878	100.0	202.2	40.3	0.441
		7.14	11.08	18.23	TWO	1.016	296.4	0.0	86.8										
43380.0	43520.0	0.312	278.6	-37.5	-5.88	0.767	77.6	0.451	0.719	163.9	386.5	0.395	1.043	10.11	1.874	98.2	212.6	44.1	0.468
		6.62	11.86	18.48	TWO	1.016	296.4	0.0	94.5										
43390.0	43520.0	0.293	280.3	-42.2	-7.32	0.760	81.4	0.439	0.712	168.7	381.7	0.399	1.024	11.92	1.870	96.6	221.6	48.7	0.511
		6.27	13.11	19.38	TWO	1.016	296.4	0.0	100.0										
43400.0	43520.0	0.293	278.9	-50.0	-10.07	0.756	85.7	0.430	0.706	174.3	377.6	0.402	1.010	15.02	1.867	95.3	229.7	55.6	0.584
		6.27	15.24	21.51	TWO	1.016	296.4	0.0	102.9										
43410.0	43520.0	0.350	273.4	-62.2	-16.82	0.757	90.6	0.426	0.704	180.8	374.6	0.404	1.003A	22.13	1.866	94.4	241.2	68.1	0.755
		7.37	20.26	27.63	TWO	1.016	296.4	0.0	102.3										
43430.0	43520.0	0.557	267.8	23.2	31.95	0.783	102.1	0.434	0.718	196.8	369.3	0.406	1.030A	-25.95	1.874	92.8	254.3	-70.9	0.867
		12.12	23.54	35.66	ONE	1.016	296.4	0.0	104.1										
43440.0	43520.0	0.406	256.3	4.5	13.89	0.820	109.4	0.457	0.747	207.3	370.5	0.406	1.088A	-7.55	1.888	93.3	233.7	-30.3	0.490
		8.57	12.51	21.08	ONE	1.016	296.4	0.0	113.4										
43450.0	43520.0	0.471	250.9	-7.2	8.91	0.885	117.4	0.501	0.811	219.3	372.7	0.405	1.217A	-2.21	1.915	94.2	227.6	-9.4	0.453
		10.05	11.43	21.48	ONE	1.016	296.4	0.0	110.9										
									ARRIVAL DATE = 2443522.0										
43360.0	43522.0	0.370	269.3	-30.4	-3.48	0.785	70.4	0.487	0.738	156.1	404.8	0.378	1.097	7.48	1.852	104.3	184.8	32.5	0.435
		7.80	10.92	18.72	TWO	1.053	303.4	0.0	66.2										
43370.0	43522.0	0.335	274.9	-31.8	-3.78	0.776	73.9	0.466	0.729	159.6	398.7	0.389	1.068	8.15	1.847	102.1	195.9	36.4	0.432
		7.09	10.82	17.91	TWO	1.053	303.4	0.0	76.0										
43380.0	43522.0	0.305	278.7	-33.8	-4.26	0.768	77.6	0.449	0.720	163.8	393.3	0.397	1.044	8.98	1.843	100.2	206.0	40.0	0.441
		6.49	11.09	17.57	TWO	1.053	303.4	0.0	84.3										
43390.0	43522.0	0.280	280.2	-36.9	-5.06	0.762	81.5	0.435	0.713	168.7	388.6	0.403	1.024	10.10	1.839	98.6	214.8	43.7	0.462
		6.03	11.69	17.72	TWO	1.053	303.4	0.0	91.0										
43400.0	43522.0	0.266	278.4	-41.9	-6.45	0.759	85.8	0.426	0.708	174.4	384.6	0.407	1.010	11.79	1.836	97.3	222.0	48.4	0.498
		5.78	12.73	18.51	TWO	1.053	303.4	0.0	95.7										
43410.0	43522.0	0.275	272.4	-49.8	-9.27	0.760	90.7	0.420	0.706	181.0	381.5	0.409	1.003A	14.90	1.835	96.3	228.0	56.0	0.566
		5.95	14.71	20.66	TWO	1.053	303.4	0.0	98.1										
43420.0	43522.0	0.359	263.5	-62.6	-17.29	0.768	96.2	0.421	0.710	188.7	379.6	0.411	1.009A	23.20	1.837	95.8	236.8	71.3	0.760
		7.57	20.40	27.97	TWO	1.053	303.4	0.0	97.3										
43440.0	43522.0	0.453	258.6	11.6	19.27	0.824	109.3	0.451	0.751	207.8	378.0	0.412	1.089A	-12.80	1.858	95.6	229.8	-48.6	0.546
		9.63	14.14	23.77	ONE	1.053	303.4	0.0	100.8										
43450.0	43522.0	0.472	251.0	-5.7	9.72	0.887	117.1	0.496	0.813	219.6	380.1	0.410	1.217A	-2.96	1.885	96.6	222.3	-13.0	0.430
		10.05	10.77	20.82	ONE	1.053	303.4	0.0	98.6										
									ARRIVAL DATE = 2443524.0										
43360.0	43524.0	0.375	269.8	-28.5	-2.58	0.785	69.9	0.492	0.738	155.8	411.2	0.375	1.101	7.20	1.823	106.3	180.8	28.6	0.458
		7.89	11.58	19.46	TWO	1.088	310.1	0.0	56.2										
43370.0	43524.0	0.337	275.3	-29.4	-2.74	0.776	73.6	0.469	0.729	159.4	405.1	0.387	1.070	7.67	1.819	104.0	190.7	32.4	0.440
		7.11	11.06	18.17	TWO	1.088	310.1	0.0	65.5										
43380.0	43524.0	0.303	279.1	-30.7	-3.00	0.769	77.4	0.449	0.721	163.6	399.7	0.397	1.045	8.22	1.815	102.1	200.1	35.7	0.435
		6.45	10.91	17.35	TWO	1.088	310.1	0.0	73.9										
43390.0	43524.0	0.274	280.4	-32.6	-3.44	0.763	81.4	0.434	0.714	168.5	395.0	0.404	1.024	8.92	1.811	100.4	208.4	38.9	0.439
		5.93	11.04	16.97	TWO	1.088	310.1	0.0	80.9										
43400.0	43524.0	0.254	278.4	-35.8	-4.16	0.761	85.8	0.423	0.709	174.3	391.1	0.409	1.010	9.88	1.808	99.1	215.3	42.4	0.454
		5.58	11.48	17.06	TWO	1.088	310.1	0.0	86.4										
43410.0	43524.0	0.249	272.3	-40.4	-5.48	0.762	90.7	0.417	0.708	181.0	388.0	0.413	1.003A	11.43	1.808	98.2	220.4	47.1	0.484
		5.50	12.33	17.82	TWO	1.088	310.1	0.0	90.2										
43420.0	43524.0	0.274	262.8	-47.4	-8.40	0.771	96.2	0.417	0.712	188.7	386.1	0.415	1.009A	14.57	1.810	97.6	223.6	55.3	0.548
		5.93	14.20	20.13	TWO	1.088	310.1	0.0	92.0										
43430.0	43524.0	0.400	254.5	-61.7	-18.95	0.790	102.4	0.427	0.724	197.7	385.4	0.415	1.033A	25.33	1.816	97.5	225.8	75.2	0.797
		8.44	21.48	29.93	TWO	1.088	310.1	0.0	91.4										
43450.0	43524.0	0.475	251.9	-3.3	11.27	0.886	116.8	0.492	0.812	219.5	386.6	0.412	1.212A	-4.45	1.857	98.7	216.8	-19.3	0.430
		10.14	10.78	20.92	ONE	1.088	310.1	0.0	86.9										
43460.0	43524.0	0.596	250.0	-13.3	6.45	0.986	124.9	0.573	0.954	232.1	389.3	0.407	1.501A	0.60	1.906	100.6	208.6	2.4	0.458
		13.08	11.59	24.67	ONE	1.088	310.1	0.0	78.5										
									ARRIVAL DATE = 2443526.0										
43360.0	43526.0	0.382	270.3	-26.8	-1.76	0.784	69.3	0.499	0.737	155.6	417.3	0.369	1.105	7.04	1.798	108.3	178.3	25.1	0.492
		8.05	12.58	20.63	TWO	1.122	316.6	0.0	47.5										
43370.0	43526.0	0.341	275.9	-27.3	-1.83	0.776	73.1	0.473	0.728	159.0	411.2	0.384	1.073	7.35	1.793	105.9	187.1	28.5	0.462
		7.20	11.71	18.91	TWO	1.122	316.6	0.0	56.0										
43380.0	43526.0	0.305	275.6	-28.0	-1.97	0.769	77.0	0.452	0.721	163.2	405.8	0.395	1.046	7.69	1.789	103.8	195.5	31.5	0.445
		6.48	11.20	17.68	TWO	1.122	316.6	0.0	63.9										
43390.0	43526.0	0.273	280.9	-29.1	-2.19	0.763	81.2	0.435	0.714	168.2	401.1	0.403	1.025	8.11	1.786	102.1	203.1	34.3	0.437
		5.91	10.97	16.88	TWO	1.122	316.6	0.0	70.8										
43400.0	43526.0	0.249	278.9	-31.0	-2.55	0.761	85.6	0.423	0.710	174.0	397.2	0.409	1.010	8.65	1.783	100.8	209.5	37.0	0.438
		5.50	11.00	16.51	TWO	1.122	316.6	0.0	76.5										
43410.0	43526.0	0.239	272.9	-33.6	-3.17	0.763	90.5	0.416	0.709	180.7	394.1	0.414	1.003A	9.43	1.783	99.9	214.3	40.0	0.448
		5.33	11.29	16.62	TWO	1.122	316.6	0.0	80.7										
43420.0	43526.0	0.250	263.7	-36.8	-4.36	0.771	96.0	0.416	0.712	188.5	392.1	0.416	1.008A	10.78	1.785	99.3	217.1	44.3	0.472
		5.51	11.98	17.49	TWO	1.122	316.6	0.0	83.2										
43430.0	43526.0	0.296	254.2	-42.2	-7.34	0.790	102.1	0.424	0.724	197.5	391.3	0.417	1.031A	13.91	1.791	99.2	217.0	52.7	0.534
		6.32	13.79	20.12	TWO	1.122	316.6	0.0	84.3										
43440.0	43526.0	0.510	252.3	-62.9	-24.91	0.824	108.9	0.447	0.751	207.7	391.8	0.416	1.087A	31.64	1.805	99.7	195.3	81.6	0.943
		10.97	25.81	36.77	TWO	1.122	316.6	0.0	85.7										
43450.0	43526.0	0.499	254.6	2.9	15.71	0.882	116.4	0.488	0.808	219.0	392.5	0.413	1.203A	-8.83	1.831	100.5	211.5	-35.0	0.482
		10.70	12.28	22.97	ONE	1.122	316.6	0.0	77.7										
43460.0	43526.0	0.584	250.5	-13.6	6.21	0.978	124.4	0.566	0.940	231.2	394.8	0.408	1.471A	0.82	1.877	102.4	205.0	3.2	0.470
		12.79	11.91	24.70	ONE	1.122	316.6	0.0	68.5										
									ARRIVAL DATE = 2443528.0										
43360.0	43528.0	0.394	270.9	-25.3	-1.00	0.783	68.4	0.509	0.736	155.2	423.2	0.361	1.111	6.97	1.776	110.3	177.0	22.1	0.537
		8.30	13.86	22.16	TWO	1.153	322.8	0.0	40.0										
43370.0	43528.0	0.349	276.5	-25.5	-1.03	0.775	72.4	0.481	0.728	158.6	416.9	0.378	1.077	7.14	1.771	107.7	184.8	25.0	0.496
		7.36	12.68	20.05	TWO	1.153	322.8	0.0	47.7										
43380.0	43528.0	0.310	280.4	-25.7	-1.08	0.768	76.5	0.457	0.720	162.8	411.5	0.391	1.049	7.32	1.767	105.6	192.2	27.6	0.468
		6.58	11.87	18.45	TWO	1.153	322.8	0.0	54.8										
43390.0	43528.0	0.276	281.8	-26.2	-1.17	0.763	80.7	0.438	0.714	167.7	406.7	0.401	1.027	7.53	1.764	103.8	199.1	29.9	0.450
		5.96	11.35	17.31	TWO	1.153	322.8	0.0	61.3										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
43400.0	43528.0	0.250	279.9	-27.2	-1.32	0.761	85.2	0.425	0.709	173.5	402.8	0.408	1.011	7.79	1.761	102.4	205.0	32.0	0.441
		5.51	11.08	16.59	TWO	1.153	322.8	0.0	66.7										
43410.0	43528.0	0.236	274.1	-28.5	-1.58	0.763	90.2	0.417	0.708	180.2	399.8	0.413	1.003A	8.15	1.761	101.4	209.5	33.9	0.439
		5.28	11.03	16.32	TWO	1.153	322.8	0.0	70.8										
43420.0	43528.0	0.242	265.2	-29.8	-2.02	0.771	95.6	0.415	0.712	188.0	397.7	0.416	1.007A	8.69	1.763	100.8	212.2	35.9	0.446
		5.38	11.22	16.60	TWO	1.153	322.8	0.0	73.4										
43430.0	43528.0	0.275	256.1	-31.2	-2.95	0.789	101.7	0.423	0.723	196.9	396.8	0.417	1.029A	9.71	1.769	100.7	212.6	39.0	0.466
		5.94	11.80	17.73	TWO	1.153	322.8	0.0	74.5										
43440.0	43528.0	0.344	249.6	-35.5	-5.80	0.821	108.4	0.444	0.749	207.0	396.9	0.416	1.081A	12.65	1.782	101.1	209.9	46.7	0.526
		7.26	13.55	20.81	TWO	1.153	322.8	0.0	74.6										
43460.0	43528.0	0.570	251.2	-14.2	5.71	0.967	123.7	0.559	0.922	229.9	399.8	0.406	1.437A	1.31	1.851	104.1	202.6	4.8	0.489
		12.45	12.49	24.94	ONE	1.153	322.8	0.0	60.0										
ARRIVAL DATE = 2443530.0																			
43360.0	43530.0	0.408	271.5	-23.9	-0.27	0.782	67.2	0.522	0.735	154.9	428.8	0.351	1.119	6.98	1.757	112.3	176.7	19.6	0.589
		8.62	15.39	24.01	TWO	1.182	328.8	0.0	33.7										
43370.0	43530.0	0.361	277.3	-23.8	-0.28	0.774	71.5	0.490	0.727	158.1	422.4	0.370	1.083	7.03	1.752	109.5	183.6	22.0	0.539
		7.60	13.93	21.52	TWO	1.182	328.8	0.0	40.5										
43380.0	43530.0	0.318	281.3	-23.7	-0.28	0.767	75.7	0.464	0.719	162.2	416.9	0.385	1.053	7.07	1.748	107.2	190.3	24.2	0.502
		6.75	12.84	19.59	TWO	1.182	328.8	0.0	46.9										
43390.0	43530.0	0.282	282.8	-23.7	-0.30	0.762	80.1	0.444	0.713	167.1	412.1	0.397	1.029	7.13	1.744	105.4	196.4	26.1	0.475
		6.06	12.07	18.14	TWO	1.182	328.8	0.0	52.8										
43400.0	43530.0	0.253	281.2	-24.0	-0.33	0.759	84.7	0.428	0.708	172.8	408.1	0.405	1.012	7.19	1.742	103.9	201.8	27.5	0.458
		5.56	11.57	17.13	TWO	1.182	328.8	0.0	57.7										
43410.0	43530.0	0.237	275.8	-24.6	-0.38	0.761	89.6	0.419	0.707	179.5	405.0	0.411	1.003	7.27	1.741	102.9	205.9	28.7	0.448
		5.30	11.29	16.58	TWO	1.182	328.8	0.0	61.6										
43420.0	43530.0	0.239	267.2	-24.9	-0.47	0.769	95.1	0.417	0.710	187.2	402.9	0.414	1.006A	7.38	1.743	102.3	208.6	29.4	0.446
		5.34	11.22	16.56	TWO	1.182	328.8	0.0	64.0										
43430.0	43530.0	0.268	258.4	-24.8	-0.63	0.786	101.1	0.423	0.721	196.0	401.9	0.416	1.026A	7.56	1.749	102.1	209.4	29.9	0.452
		5.82	11.41	17.23	TWO	1.182	328.8	0.0	64.8										
43440.0	43530.0	0.327	252.2	-24.8	-1.00	0.817	107.9	0.443	0.745	205.9	401.8	0.415	1.074A	7.96	1.762	102.5	208.1	30.4	0.471
		6.92	11.95	18.87	TWO	1.182	328.8	0.0	63.9										
43450.0	43530.0	0.421	249.4	-27.1	-2.65	0.869	115.2	0.482	0.794	216.8	402.7	0.411	1.176A	9.64	1.785	103.6	204.4	33.9	0.521
		8.89	13.40	22.30	TWO	1.182	328.8	0.0	62.0										
43460.0	43530.0	0.552	251.7	-16.8	3.80	0.955	123.1	0.551	0.902	228.4	404.3	0.404	1.399A	3.21	1.827	105.4	201.2	10.9	0.520
		12.00	13.37	25.37	ONE	1.182	328.8	0.0	53.2										
ARRIVAL DATE = 2443532.0																			
43360.0	43532.0	0.427	272.0	-22.7	0.45	0.780	65.8	0.538	0.734	154.6	434.3	0.339	1.129	7.07	1.741	114.3	177.1	17.5	0.649
		9.03	17.15	26.18	TWO	1.209	334.6	0.0	28.2										
43370.0	43532.0	0.375	278.0	-22.4	0.44	0.772	70.3	0.503	0.725	157.6	427.7	0.361	1.090	6.99	1.736	111.3	183.4	19.5	0.590
		7.90	15.40	23.31	TWO	1.209	334.6	0.0	34.3										
43380.0	43532.0	0.330	282.3	-22.0	0.45	0.765	74.8	0.474	0.718	161.5	422.0	0.378	1.058	6.92	1.732	108.9	189.4	21.3	0.544
		6.97	14.07	21.04	TWO	1.209	334.6	0.0	40.1										
43390.0	43532.0	0.290	284.1	-21.6	0.47	0.760	79.2	0.451	0.711	166.3	417.1	0.391	1.032	6.84	1.728	106.9	195.0	22.7	0.510
		6.22	13.08	19.30	TWO	1.209	334.6	0.0	45.3										
43400.0	43532.0	0.259	282.9	-21.4	0.50	0.757	83.9	0.434	0.707	172.0	413.1	0.400	1.014	6.75	1.726	105.4	199.8	23.8	0.485
		5.67	12.37	18.04	TWO	1.209	334.6	0.0	49.8										
43410.0	43532.0	0.240	277.9	-21.5	0.56	0.759	89.0	0.423	0.705	178.6	409.9	0.407	1.003	6.64	1.725	104.3	203.7	24.3	0.469
		5.35	11.91	17.26	TWO	1.209	334.6	0.0	53.3										
43420.0	43532.0	0.240	269.7	-21.3	0.66	0.766	94.4	0.419	0.708	186.2	407.7	0.411	1.005A	6.49	1.726	103.6	206.3	24.3	0.462
		5.35	11.68	17.03	TWO	1.209	334.6	0.0	55.5										
43430.0	43532.0	0.265	260.9	-20.7	0.84	0.782	100.5	0.425	0.718	194.9	406.5	0.413	1.022A	6.28	1.732	103.4	207.3	23.5	0.462
		5.78	11.70	17.48	TWO	1.209	334.6	0.0	56.2										
43440.0	43532.0	0.321	254.7	-19.8	1.19	0.811	107.2	0.443	0.739	204.6	406.3	0.412	1.067A	5.89	1.743	103.8	206.7	21.5	0.473
		6.80	12.02	18.82	TWO	1.209	334.6	0.0	55.1										
43450.0	43532.0	0.410	252.2	-18.3	2.16	0.861	114.5	0.479	0.784	215.3	407.0	0.408	1.160A	4.87	1.766	104.8	204.5	17.0	0.497
		8.65	12.71	21.36	TWO	1.209	334.6	0.0	51.9										
43460.0	43532.0	0.580	256.8	-2.6	14.57	0.941	122.3	0.544	0.881	226.6	408.4	0.401	1.360A	-7.58	1.805	106.6	200.0	-23.3	0.576
		12.70	15.02	27.72	TWO	1.209	334.6	0.0	49.8										
ARRIVAL DATE = 2443534.0																			
43360.0	43534.0	0.450	272.6	-21.6	1.18	0.779	64.2	0.557	0.732	154.3	439.7	0.325	1.140	7.22	1.728	116.5	178.1	15.7	0.717
		9.54	19.12	28.66	TWO	1.234	340.4	0.0	23.5										
43370.0	43534.0	0.394	278.8	-21.1	1.14	0.770	68.9	0.518	0.724	157.1	432.9	0.349	1.098	7.03	1.723	113.2	183.9	17.4	0.648
		8.30	17.10	25.39	TWO	1.234	340.4	0.0	29.0										
43380.0	43534.0	0.344	283.4	-20.4	1.14	0.763	73.6	0.486	0.716	160.8	427.0	0.368	1.064	6.84	1.719	110.6	189.4	18.8	0.594
		7.27	15.52	22.78	TWO	1.234	340.4	0.0	34.2										
43390.0	43534.0	0.302	285.6	-19.8	1.17	0.757	78.2	0.460	0.710	165.4	422.0	0.383	1.036	6.64	1.715	108.5	194.5	19.9	0.552
		6.44	14.31	20.75	TWO	1.234	340.4	0.0	38.9										
43400.0	43534.0	0.268	284.8	-19.3	1.23	0.755	83.0	0.441	0.705	171.0	417.8	0.394	1.016	6.43	1.712	106.8	198.9	20.6	0.521
		5.82	13.42	19.24	TWO	1.234	340.4	0.0	43.0										
43410.0	43534.0	0.246	280.4	-18.9	1.35	0.756	88.1	0.428	0.703	177.5	414.5	0.402	1.004	6.18	1.711	105.6	202.5	20.8	0.500
		5.44	12.80	18.25	TWO	1.234	340.4	0.0	46.1										
43420.0	43534.0	0.242	272.6	-18.6	1.55	0.762	93.6	0.423	0.705	185.0	412.2	0.407	1.003A	5.86	1.712	104.9	205.0	20.3	0.488
		5.38	12.45	17.83	TWO	1.234	340.4	0.0	48.2										
43430.0	43534.0	0.264	263.9	-17.9	1.87	0.777	99.7	0.427	0.714	193.5	410.9	0.409	1.018A	5.43	1.717	104.6	206.3	18.9	0.485
		5.75	12.37	18.13	TWO	1.234	340.4	0.0	48.8										
43440.0	43534.0	0.316	257.4	-16.9	2.46	0.804	106.3	0.443	0.733	203.1	410.5	0.408	1.058A	4.73	1.728	104.9	206.1	16.2	0.494
		6.71	12.63	19.34	TWO	1.234	340.4	0.0	47.9										
43450.0	43534.0	0.402	254.6	-15.3	3.78	0.850	113.6	0.477	0.774	213.5	411.0	0.405	1.142A	3.30	1.748	105.9	204.5	10.8	0.518
		8.48	13.32	21.80	TWO	1.234	340.4	0.0	45.2										
43460.0	43534.0	0.536	256.0	-9.8	8.76	0.926	121.4	0.537	0.859	224.6	412.1	0.398	1.320A	-1.77	1.785	107.7	201.6	-5.3	0.572
		11.59	14.88	26.47	TWO	1.234	340.4	0.0	41.6										
ARRIVAL DATE = 2443536.0																			
43360.0	43536.0	0.476	273.1	-20.6	1.93	0.777	62.2	0.579	0.731	154.1	445.1	0.308	1.154	7.46	1.718	118.8	179.4	14.3	0.791
		10.17	21.32	31.49	TWO	1.257	346.0	0.0	19.5										
43370.0	43536.0	0.416	279.6	-20.0	1.84	0.768	67.3	0.536	0.722	156.6	438.0	0.335	1.109	7.13	1.713	115.2	184.9	15.7	0.712
		8.78	19.00	27.78	TWO	1.257	346.0	0.0	24.4										
43380.0	43536.0	0.362	284.5	-19.1	1.81	0.760	72.2	0.500	0.714	160.1	431.9	0.357	1.071	6.82	1.708	112.4	190.1	16.8	0.650
		7.64	17.17	24.80	TWO	1.257	346.0	0.0	29.1										
43390.0	43536.0	0.317	287.2	-18.2	1.82	0.755	77.0	0.472	0.707	164.5	426.6	0.374	1.041	6.52	1.704	110.0	194.8	17.6	0.601
		6.72	15.75	22.46	TWO	1.257	346.0	0.0	33.3										

DEPART	ARRIVE	S, FEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
43400.0	43536.C	0.279	287.0	-17.4	1.89	0.751	81.9	0.450	0.703	169.9	422.3	0.386	1.019	6.20	1.701	108.2	198.9	18.0	0.565
		6.02	14.67	20.69	TWO	1.257	346.0	0.0	37.0										
43410.0	43536.C	0.254	283.1	-16.8	2.03	0.752	87.1	0.435	0.700	176.2	418.8	0.395	1.005	5.83	1.700	106.9	202.3	17.9	0.538
		5.58	13.91	19.48	TWO	1.257	346.0	0.0	39.9										
43420.0	43536.C	0.246	275.9	-16.3	2.27	0.757	92.6	0.428	0.702	183.5	416.4	0.401	1.002A	5.40	1.701	106.1	204.8	17.1	0.522
		5.45	13.44	18.89	TWO	1.257	346.0	0.0	41.8										
43430.0	43536.C	0.263	267.2	-15.7	2.65	0.771	98.7	0.430	0.709	191.9	414.9	0.404	1.014A	4.83	1.705	105.7	206.1	15.5	0.517
		5.74	13.28	19.02	TWO	1.257	346.0	0.0	42.5										
43440.0	43536.C	0.311	260.3	-14.9	3.31	0.796	105.3	0.444	0.726	201.3	414.3	0.404	1.049A	3.99	1.715	106.0	206.2	12.6	0.524
		6.61	13.49	20.10	TWO	1.257	346.0	0.0	41.8										
43450.0	43536.C	0.393	257.0	-13.7	4.61	0.839	112.6	0.475	0.762	211.5	414.6	0.400	1.124A	2.53	1.734	106.9	205.1	7.7	0.548
		8.28	14.20	22.47	TWO	1.257	346.0	0.0	39.8										
43460.0	43536.C	0.516	257.5	-10.7	7.99	0.909	120.4	0.530	0.837	222.4	415.5	0.394	1.281A	-1.02	1.767	108.6	202.9	-2.8	0.602
		11.11	15.75	26.86	TWO	1.257	346.0	0.0	37.0										
ARRIVAL DATE = 2443538.0																			
43360.0	43538.C	0.508	273.4	-19.8	2.74	0.775	59.9	0.605	0.729	154.1	450.6	0.288	1.171	7.79	1.711	121.3	181.0	13.1	0.874
		10.92	23.76	34.68	TWO	1.279	351.6	0.0	16.1										
43370.0	43538.0	0.442	280.4	-19.1	2.56	0.766	65.3	0.557	0.720	156.2	443.1	0.319	1.121	7.31	1.706	117.4	186.3	14.2	0.784
		9.37	21.12	30.48	TWO	1.279	351.6	0.0	20.4										
43380.0	43538.C	0.384	285.7	-18.0	2.47	0.758	70.5	0.518	0.712	159.3	436.6	0.343	1.081	6.88	1.701	114.2	191.2	15.1	0.713
		8.09	19.02	27.11	TWO	1.279	351.6	0.0	24.6										
43390.0	43538.C	0.334	288.8	-16.9	2.45	0.752	75.5	0.486	0.705	163.5	431.1	0.362	1.048	6.46	1.697	111.7	195.7	15.7	0.657
		7.06	17.37	24.43	TWO	1.279	351.6	0.0	28.5										
43400.0	43538.C	0.293	289.2	-15.9	2.51	0.748	80.6	0.462	0.700	168.6	426.6	0.377	1.023	6.04	1.694	109.7	199.6	15.9	0.614
		6.28	16.11	22.38	TWO	1.279	351.6	0.0	31.9										
43410.0	43538.0	0.264	286.2	-15.1	2.64	0.747	85.9	0.444	0.697	174.8	423.0	0.387	1.007	5.58	1.692	108.2	202.8	15.6	0.582
		5.75	15.19	20.94	TWO	1.279	351.6	0.0	34.6										
43420.0	43538.C	0.251	279.5	-14.5	2.88	0.752	91.5	0.435	0.698	181.9	420.3	0.394	1.001A	5.05	1.692	107.3	205.2	14.7	0.562
		5.54	14.60	20.14	TWO	1.279	351.6	0.0	36.4										
43430.0	43538.C	0.264	271.0	-14.0	3.27	0.764	97.6	0.435	0.704	190.1	418.6	0.398	1.009A	4.39	1.696	106.8	206.7	13.0	0.554
		5.75	14.35	20.10	TWO	1.279	351.6	0.0	37.1										
43440.0	43538.C	0.306	263.6	-13.5	3.93	0.787	104.2	0.446	0.719	199.2	417.8	0.398	1.039A	3.49	1.705	107.0	207.0	10.2	0.559
		6.52	14.51	21.03	TWO	1.279	351.6	0.0	36.7										
43450.0	43538.0	0.382	259.6	-12.7	5.12	0.827	111.5	0.473	0.751	209.3	417.9	0.395	1.106A	2.07	1.722	107.8	206.3	5.8	0.582
		8.05	15.19	23.24	TWO	1.279	351.6	0.0	35.2										
43460.0	43538.C	0.497	259.3	-11.0	7.68	0.892	119.3	0.523	0.816	219.9	418.6	0.389	1.243A	-0.72	1.753	109.3	204.6	-1.9	0.634
		10.66	16.69	27.35	TWO	1.279	351.6	0.0	33.1										
ARRIVAL DATE = 2443540.0																			
43360.0	43540.C	0.545	273.7	-19.1	3.62	0.773	57.2	0.635	0.728	154.2	456.2	0.266	1.190	8.22	1.707	124.1	182.8	12.1	0.966
		11.83	26.48	38.31	TWO	1.298	357.1	0.0	13.3										
43370.0	43540.C	0.473	281.0	-18.3	3.32	0.763	63.1	0.582	0.718	155.8	448.2	0.300	1.136	7.56	1.701	119.8	188.0	13.0	0.864
		10.08	23.48	33.55	TWO	1.298	357.1	0.0	16.9										
43380.0	43540.C	0.410	286.8	-17.1	3.15	0.755	68.5	0.538	0.710	158.6	441.4	0.328	1.092	6.99	1.696	116.2	192.8	13.7	0.783
		8.65	21.08	29.73	TWO	1.298	357.1	0.0	20.7										
43390.0	43540.0	0.356	290.5	-15.8	3.08	0.748	73.8	0.503	0.703	162.5	435.6	0.349	1.056	6.47	1.692	113.4	197.0	14.1	0.719
		7.49	19.18	26.68	TWO	1.298	357.1	0.0	24.3										
43400.0	43540.C	0.310	291.6	-14.6	3.09	0.744	79.0	0.475	0.697	167.4	430.8	0.366	1.028	5.94	1.689	111.2	200.8	14.1	0.669
		6.60	17.72	24.31	TWO	1.298	357.1	0.0	27.4										
43410.0	43540.C	0.277	289.3	-13.6	3.20	0.743	84.4	0.455	0.693	173.3	426.9	0.378	1.009	5.40	1.687	109.6	203.9	13.7	0.632
		5.97	16.63	22.60	TWO	1.298	357.1	0.0	29.9										
43420.0	43540.C	0.259	283.4	-12.9	3.42	0.746	90.1	0.443	0.693	180.2	424.0	0.386	1.000A	4.79	1.686	108.5	206.3	12.7	0.607
		5.67	15.91	21.58	TWO	1.298	357.1	0.0	31.6										
43430.0	43540.0	0.265	275.1	-12.5	3.80	0.756	96.3	0.440	0.698	188.1	422.1	0.391	1.005A	4.06	1.689	107.9	207.8	11.0	0.595
		5.77	15.56	21.33	TWO	1.298	357.1	0.0	32.5										
43440.0	43540.C	0.302	267.3	-12.3	4.41	0.777	103.0	0.449	0.711	197.0	421.1	0.392	1.030A	3.12	1.697	107.9	208.4	8.5	0.598
		6.43	15.63	22.07	TWO	1.298	357.1	0.0	32.4										
43450.0	43540.0	0.372	262.6	-11.9	5.48	0.814	110.3	0.473	0.739	206.8	421.0	0.389	1.088A	1.76	1.713	108.6	208.1	4.6	0.619
		7.83	16.25	24.08	TWO	1.298	357.1	0.0	31.3										
43460.0	43540.0	0.479	261.5	-11.0	7.51	0.874	118.1	0.518	0.795	217.3	421.5	0.383	1.207A	-0.56	1.740	110.0	206.7	-1.4	0.667
		10.22	17.66	27.89	TWO	1.298	357.1	0.0	29.7										
ARRIVAL DATE = 2443542.0																			
43360.0	43542.0	0.589	273.7	-18.5	4.61	0.771	54.1	0.669	0.726	154.6	462.0	0.241	1.212	8.78	1.706	127.2	184.6	11.2	1.069
		12.90	29.51	42.41	TWO	1.316	2.6	0.0	11.4										
43370.0	43542.0	0.508	281.6	-17.6	4.14	0.761	60.4	0.611	0.716	155.7	453.5	0.279	1.154	7.91	1.700	122.4	189.8	12.0	0.953
		10.93	26.10	37.03	TWO	1.316	2.6	0.0	14.0										
43380.0	43542.C	0.440	287.8	-16.3	3.86	0.752	66.2	0.562	0.708	158.0	446.3	0.310	1.105	7.18	1.695	118.4	194.6	12.5	0.861
		9.32	23.37	32.69	TWO	1.316	2.6	0.0	17.2										
43390.0	43542.C	0.381	292.1	-14.9	3.70	0.744	71.8	0.523	0.700	161.5	440.1	0.334	1.066	6.53	1.690	115.3	198.8	12.8	0.787
		8.02	21.20	29.22	TWO	1.316	2.6	0.0	20.5										
43400.0	43542.0	0.331	293.9	-13.5	3.66	0.739	77.2	0.492	0.694	166.0	435.0	0.353	1.035	5.91	1.687	112.8	202.4	12.7	0.730
		6.99	19.51	26.50	TWO	1.316	2.6	0.0	23.4										
43410.0	43542.0	0.292	292.6	-12.3	3.73	0.737	82.8	0.468	0.690	171.6	430.8	0.367	1.013	5.27	1.684	111.0	205.5	12.2	0.686
		6.25	18.24	24.49	TWO	1.316	2.6	0.0	25.8										
43420.0	43542.0	0.269	287.6	-11.6	3.91	0.739	88.6	0.453	0.689	178.3	427.7	0.376	1.001	4.59	1.684	109.7	207.9	11.2	0.657
		5.84	17.36	23.20	TWO	1.316	2.6	0.0	27.5										
43430.0	43542.0	0.269	279.7	-11.2	4.25	0.748	94.8	0.448	0.692	186.0	425.5	0.382	1.002A	3.82	1.686	109.0	209.5	9.5	0.640
		5.83	16.89	22.72	TWO	1.316	2.6	0.0	28.4										
43440.0	43542.0	0.298	271.6	-11.2	4.81	0.767	101.5	0.453	0.703	194.6	424.3	0.384	1.022A	2.86	1.692	108.8	210.3	7.2	0.639
		6.36	16.86	23.22	TWO	1.316	2.6	0.0	28.5										
43450.0	43542.0	0.361	266.0	-11.3	5.74	0.800	108.9	0.473	0.727	204.2	423.9	0.383	1.071A	1.55	1.706	109.4	210.2	3.8	0.657
		7.60	17.39	24.99	TWO	1.316	2.6	0.0	27.8										
43460.0	43542.C	0.460	264.1	-11.0	7.40	0.855	116.7	0.513	0.775	214.5	424.2	0.377	1.173A	-0.47	1.731	110.7	209.2	-1.1	0.702
		9.79	18.68	28.47	TWO	1.316	2.6	0.0	26.6										
ARRIVAL DATE = 2443544.0																			
43370.0	43544.0	0.550	281.9	-17.1	5.05	0.758	57.3	0.644	0.715	155.7	459.0	0.254	1.175	8.38	1.702	125.3	191.8	11.1	1.053
		11.94	29.04	40.98	TWO	1.332	8.1	0.0	11.7										
43380.0	43544.0	0.475	288.7	-15.8	4.61	0.749	63.6	0.590	0.705	157.5	451.2	0.289	1.122	7.45	1.697	120.9	196.5	11.5	0.947
		10.12	25.92	36.05	TWO	1.332	8.1	0.0	14.2										
43390.0	43544.C	0.410	293.6	-14.2	4.35	0.741	69.5	0.546	0.697	160.6	444.6	0.316	1.078	6.66	1.692	117.4	200.7	11.6	0.863
		8.65	23.44	32.09	TWO	1.332	8.1	0.0	17.1										

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DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
43400.0	43544.0	0.355	296.2	-12.6	4.23	0.735	75.1	0.511	0.690	164.7	439.1	0.338	1.043	5.92	1.688	114.6	204.4	11.5	0.797
		7.48	21.49	28.97	TWO	1.332	8.1	0.0	19.8										
43410.0	43544.0	0.311	295.8	-11.3	4.24	0.731	80.9	0.484	0.686	170.0	434.7	0.354	1.018	5.20	1.685	112.5	207.4	10.9	0.747
		6.61	20.00	26.61	TWO	1.332	8.1	0.0	22.1										
43420.0	43544.0	0.282	291.8	-10.4	4.37	0.732	86.8	0.466	0.684	176.3	431.2	0.365	1.002	4.45	1.683	111.0	209.8	9.9	0.711
		6.07	18.95	25.02	TWO	1.332	8.1	0.0	23.8										
43430.0	43544.0	0.274	284.6	-10.1	4.65	0.740	93.1	0.457	0.686	183.7	428.8	0.372	0.999A	3.63	1.685	110.1	211.5	8.3	0.690
		5.93	18.33	24.26	TWO	1.332	8.1	0.0	24.8										
43440.0	43544.0	0.295	276.2	-10.2	5.14	0.756	99.9	0.459	0.695	192.1	427.3	0.376	1.014A	2.65	1.690	109.8	212.5	6.2	0.684
		6.31	18.18	24.49	TWO	1.332	8.1	0.0	25.1										
43450.0	43544.0	0.350	269.5	-10.6	5.95	0.785	107.3	0.475	0.715	201.4	426.6	0.375	1.054A	1.40	1.702	110.2	212.6	3.2	0.698
		7.38	18.59	25.97	TWO	1.332	8.1	0.0	24.7										
43460.0	43544.0	0.442	267.0	-10.8	7.33	0.836	115.3	0.510	0.756	211.5	426.7	0.370	1.142A	-0.40	1.724	111.3	212.0	-0.9	0.738
		9.37	19.74	29.10	TWO	1.332	8.1	0.0	23.9										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2443850.0											
43720.0	43850.0	C.499	258.8	-15.6	5.93	0.703	62.3	0.641	0.678	161.2	297.7	0.243D	1.112	-10.01	2.241	66.4	184.0	-20.8	1.004
		10.71	27.59	38.30	ONE	0.683	186.7	0.0	159.0										
43730.0	43850.0	0.489	264.4	-17.0	5.11	0.674	64.3	0.651	0.659	164.0	290.9	0.230D	1.087	-8.77	2.231	63.7	186.7	-16.6	1.071
		10.46	29.59	40.05	ONE	0.683	186.7	0.0	163.4										
43740.0	43850.0	C.480	269.3	-17.8	4.60	0.643	67.0	0.663	0.640	166.9	284.3	0.215D	1.064	-7.81	2.221	61.1	189.4	-13.3	1.146
		10.24	31.79	42.03	ONE	0.683	186.7	0.0	166.4										
43750.0	43850.0	0.472	273.0	-18.2	4.28	0.609	70.6	0.677	0.621	170.0	277.8	0.200D	1.042	-7.01	2.211	58.4	191.9	-10.8	1.224
		10.06	34.10	44.16	ONE	0.683	186.7	0.0	168.0										
43760.0	43850.0	0.467	275.2	-18.5	4.12	0.574	75.6	0.693	0.604	173.4	271.5	0.185D	1.022	-6.28	2.200	55.8	194.3	-8.8	1.304
		9.95	36.49	46.44	ONE	0.683	186.7	0.0	168.4										
43770.0	43850.0	C.469	275.5	-18.7	4.08	0.541	82.9	0.712	0.589	177.1	265.5	0.170D	1.008	-5.58	2.190	53.1	196.6	-7.1	1.386
		10.00	38.93	48.93	ONE	0.683	186.7	0.0	167.9										
43780.0	43850.0	0.484	273.4	-19.0	4.16	0.517	93.2	0.733	0.579	181.2	259.8	0.155D	1.002A	-4.88	2.184	50.4	198.6	-5.6	1.471
		10.35	41.45	51.80	ONE	0.683	186.7	0.0	166.9										
43790.0	43850.0	0.526	269.0	-19.3	4.38	0.521	107.5	0.757	0.578	185.9	254.7	0.140D	1.016A	-4.11	2.183	47.6	200.5	-4.3	1.560
		11.35	44.09	55.44	ONE	0.683	186.7	0.0	165.6										
								ARRIVAL DATE = 2443852.0											
43720.0	43852.0	0.483	258.9	-9.4	10.12	0.716	64.6	0.610	0.686	160.7	309.5	0.268D	1.104	-13.35	2.233	71.3	192.7	-30.3	0.967
		10.32	26.49	36.80	ONE	0.701	199.3	0.0	149.0										
43730.0	43852.0	0.463	264.4	-12.3	8.03	0.690	66.9	0.616	0.668	163.6	302.9	0.256D	1.080	-10.78	2.224	68.8	194.6	-22.9	0.997
		9.85	27.39	37.24	ONE	0.701	199.3	0.0	156.6										
43740.0	43852.0	C.447	268.9	-13.9	6.80	0.663	69.8	0.625	0.651	166.7	296.5	0.244D	1.057	-9.04	2.215	66.4	196.8	-17.7	1.050
		9.49	28.55	38.44	ONE	0.701	199.3	0.0	162.1										
43750.0	43852.0	0.434	272.2	-14.9	6.05	0.635	73.6	0.635	0.634	170.0	290.2	0.232D	1.036	-7.73	2.206	64.0	199.1	-13.9	1.112
		9.20	30.79	39.99	ONE	0.701	199.3	0.0	166.1										
43760.0	43852.0	0.426	273.9	-15.6	5.58	0.607	78.7	0.647	0.619	173.7	284.3	0.219D	1.019	-6.64	2.197	61.6	201.4	-10.9	1.178
		9.00	32.76	41.76	ONE	0.701	199.3	0.0	168.9										
43770.0	43852.0	0.424	273.3	-16.1	5.32	0.583	85.6	0.661	0.606	177.7	278.7	0.206D	1.006	-5.68	2.189	59.3	203.4	-8.6	1.247
		8.97	34.79	43.76	ONE	0.701	199.3	0.0	170.5										
43780.0	43852.0	0.437	270.3	-16.7	5.22	0.570	95.1	0.678	0.598	182.4	273.6	0.193D	1.004A	-4.78	2.184	57.0	205.2	-6.7	1.316
		9.26	36.85	46.11	ONE	0.701	199.3	0.0	171.1										
43790.0	43852.0	0.477	265.0	-17.2	5.28	0.582	107.4	0.699	0.601	188.0	269.3	0.181D	1.021A	-3.88	2.186	54.8	206.7	-5.0	1.387
		10.19	38.95	49.15	ONE	0.701	199.3	0.0	171.1										
43800.0	43852.0	0.567	258.6	-17.7	5.51	0.645	122.2	0.727	0.629	194.9	266.4	0.172D	1.085A	-2.92	2.202	52.8	207.6	-3.5	1.463
		12.36	41.19	53.55	ONE	0.701	199.3	0.0	171.0										
								ARRIVAL DATE = 2443854.0											
43720.0	43854.0	0.508	258.0	1.9	18.59	0.727	66.5	0.583	0.694	160.3	320.9	0.289D	1.098	-21.06	2.213	75.8	205.8	-46.8	1.057
		10.91	29.17	40.08	ONE	0.728	211.6	0.0	132.9										
43730.0	43854.0	0.456	263.8	-4.7	12.78	0.705	69.1	0.585	0.677	163.4	314.7	0.281D	1.074	-14.71	2.205	73.6	203.3	-33.6	0.971
		9.69	26.62	36.31	ONE	0.728	211.6	0.0	145.5										
43740.0	43854.0	0.427	268.1	-8.3	9.91	0.681	72.3	0.590	0.661	166.6	308.5	0.271D	1.051	-11.28	2.197	71.4	204.3	-24.7	0.975
		9.03	26.75	35.78	ONE	0.728	211.6	0.0	154.3										
43750.0	43854.0	0.407	271.0	-10.4	8.26	0.658	76.2	0.596	0.646	170.2	302.6	0.261D	1.031	-9.05	2.189	69.2	206.1	-18.6	1.011
		8.58	27.82	36.40	ONE	0.728	211.6	0.0	160.7										
43760.0	43854.0	0.393	272.0	-11.8	7.25	0.637	81.3	0.604	0.633	174.2	297.0	0.251D	1.015	-7.40	2.182	67.1	208.1	-14.1	1.060
		8.28	29.25	37.53	ONE	0.728	211.6	0.0	165.4										
43770.0	43854.0	0.388	270.6	-12.8	6.63	0.620	88.0	0.614	0.623	178.7	291.9	0.240D	1.005	-6.07	2.176	65.1	209.9	-10.8	1.113
		8.18	30.82	39.00	ONE	0.728	211.6	0.0	169.1										
43780.0	43854.0	0.400	266.6	-13.8	6.27	0.615	96.7	0.628	0.618	184.0	287.4	0.230D	1.006A	-4.91	2.173	63.3	211.4	-8.2	1.167
		8.44	32.42	40.85	ONE	0.728	211.6	0.0	171.8										
43790.0	43854.0	0.442	260.5	-14.8	6.11	0.635	107.8	0.645	0.626	190.5	284.1	0.222D	1.029A	-3.84	2.177	61.6	212.5	-6.0	1.220
		9.37	34.00	43.37	ONE	0.728	211.6	0.0	173.9										
43800.0	43854.0	0.533	253.8	-15.6	6.13	0.701	120.7	0.673	0.660	198.6	282.4	0.216D	1.104A	-2.79	2.196	60.1	212.8	-4.2	1.274
		11.52	35.61	47.13	ONE	0.728	211.6	0.0	175.6										
								ARRIVAL DATE = 2443856.0											
43730.0	43856.0	0.508	261.6	7.8	22.73	0.717	70.9	0.559	0.685	163.3	325.8	0.303D	1.068	-23.92	2.178	77.9	218.5	-51.3	1.106
		10.93	30.62	41.55	ONE	0.764	223.4	0.0	128.6										
43740.0	43856.0	C.431	266.7	C.4	15.04	0.697	74.3	0.559	0.671	166.8	320.2	0.296D	1.046	-15.64	2.170	75.9	213.0	-36.3	0.958
		9.13	26.25	35.38	ONE	0.764	223.4	0.0	142.4										
43750.0	43856.0	0.393	269.4	-3.9	11.40	0.678	78.4	0.562	0.658	170.6	314.6	0.288D	1.027	-11.40	2.163	74.0	213.1	-26.0	0.937
		8.29	25.61	33.90	ONE	0.764	223.4	0.0	152.1										
43760.0	43856.0	0.371	269.8	-6.7	9.37	0.662	83.5	0.567	0.646	175.0	309.5	0.280D	1.012	-8.73	2.157	72.2	214.3	-19.0	0.956
		7.81	26.17	33.99	ONE	0.764	223.4	0.0	159.0										
43770.0	43856.0	0.363	267.6	-8.7	8.14	0.651	90.0	0.574	0.638	180.0	304.9	0.272D	1.005A	-6.81	2.153	70.5	215.8	-14.1	0.989
		7.64	27.16	34.80	ONE	0.764	223.4	0.0	164.0										
43780.0	43856.0	0.374	262.6	-10.4	7.37	0.654	98.3	0.584	0.637	186.0	301.1	0.265D	1.010A	-5.28	2.152	69.0	217.0	-10.4	1.027
		7.88	28.27	36.15	ONE	0.764	223.4	0.0	167.8										
43790.0	43856.0	0.418	255.9	-12.0	6.92	0.680	108.3	0.600	0.649	193.3	298.6	0.260D	1.039A	-3.98	2.159	67.8	217.6	-7.5	1.064
		8.83	29.37	38.20	ONE	0.764	223.4	0.0	170.6										
43800.0	43856.0	C.512	249.3	-13.5	6.70	0.749	119.9	0.629	0.691	202.6	298.2	0.257D	1.126A	-2.78	2.180	66.9	217.4	-5.1	1.099
		11.02	30.42	41.44	ONE	0.764	223.4	0.0	172.1										
								ARRIVAL DATE = 2443858.0											
43740.0	43858.0	0.511	263.7	12.9	25.99	0.710	76.0	0.534	0.679	167.0	330.9	0.317D	1.042	-25.89	2.137	80.0	229.8	-54.7	1.125
		10.99	31.18	42.17	ONE	0.806	234.6	0.0	125.1										
43750.0	43858.0	0.409	267.4	5.2	16.62	0.695	80.2	0.533	0.668	171.2	326.1	0.312D	1.023	-15.92	2.131	78.4	221.1	-38.3	0.924
		8.63	25.22	33.86	ONE	0.806	234.6	0.0	139.8										
43760.0	43858.0	0.366	267.5	0.1	12.37	0.683	85.4	0.535	0.658	175.9	321.5	0.306D	1.010	-11.04	2.126	76.8	220.4	-26.8	0.879
		7.70	23.92	31.62	ONE	0.806	234.6	0.0	149.9										
43770.0	43858.0	0.349	264.5	-3.5	10.04	0.678	91.7	0.539	0.653	181.5	317.5	0.301D	1.005A	-8.05	2.123	75.4	221.0	-19.0	0.883
		7.36	24.01	31.37	ONE	0.806	234.6	0.0	156.8										
43780.0	43858.0	0.359	258.8	-6.5	8.65	0.685	99.6	0.548	0.655	188.1	314.4	0.296D	1.014A	-5.94	2.124	74.2	221.8	-13.6	0.901
		7.56	24.54	32.10	ONE	0.806	234.6	0.0	161.4										
43790.0	43858.0	0.404	251.7	-9.1	7.79	0.716	108.9	0.564	0.672	196.2	312.8	0.293D	1.050A	-4.29	2.133	73.3	221.9	-9.5	0.921
		8.53	25.16	33.69	ONE	0.806	234.6	0.0	164.2										
43800.0	43858.0	0.501	245.4	-11.4	7.27	0.788	119.6	0.595	0.721	206.6	313.3	0.293D	1.150A	-2.89	2.157	72.9	220.9	-6.4	0.941
		10.76	25.73	36.49	ONE	0.806	234.6	0.0	165.0										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2443860.0											
43720.0	43860.0	0.517	244.0	-57.0	-24.79	0.750	71.0	0.520	0.710	160.3	357.1	0.341D	1.080	24.36	2.110	89.0	223.3	67.0	0.946
		11.14	25.87	37.01	TWO	0.850	245.2	0.0	111.3										
43750.0	43860.0	0.507	264.4	16.8	27.79	0.708	81.6	0.509	0.676	171.8	336.7	0.332D	1.021	-26.45	2.093	82.2	238.2	-57.2	1.099
		10.90	30.42	41.32	ONE	0.850	245.2	0.0	122.6										
43760.0	43860.0	0.390	265.3	8.9	17.32	0.700	86.9	0.509	0.669	177.0	332.9	0.329D	1.009	-15.38	2.089	80.9	227.4	-39.3	0.864
		8.21	23.45	31.67	ONE	0.850	245.2	0.0	137.4										
43770.0	43860.0	0.351	261.9	2.8	12.72	0.699	93.1	0.511	0.666	183.0	329.5	0.325D	1.006A	-10.14	2.087	79.8	225.8	-26.7	0.804
		7.39	21.69	29.08	ONE	0.850	245.2	0.0	147.4										
43780.0	43860.0	0.354	255.5	-2.1	10.25	0.711	100.6	0.519	0.671	190.2	327.1	0.323D	1.019A	-7.00	2.090	78.9	225.7	-18.4	0.793
		7.45	21.38	28.83	ONE	0.850	245.2	0.0	153.4										
43790.0	43860.0	0.399	248.2	-6.1	8.78	0.746	109.5	0.536	0.692	199.1	326.2	0.321D	1.062A	-4.81	2.101	78.4	225.2	-12.5	0.797
		8.41	21.47	29.89	ONE	0.850	245.2	0.0	156.5										
43800.0	43860.0	0.497	242.2	-9.4	7.87	0.820	119.4	0.570	0.749	210.2	327.6	0.322D	1.175A	-3.12	2.127	78.3	223.3	-8.1	0.802
		10.66	21.63	32.29	ONE	0.850	245.2	0.0	156.7										
								ARRIVAL DATE = 2443862.0											
43720.0	43862.0	0.426	251.0	-49.2	-15.49	0.755	71.8	0.508	0.714	160.3	366.5	0.351	1.077	15.68	2.068	92.2	208.6	57.2	0.664
		9.02	17.59	26.61	TWO	0.896	255.2	0.0	111.8										
43730.0	43862.0	0.480	250.1	-59.2	-23.54	0.741	75.2	0.499	0.703	164.0	361.2	0.352	1.053	24.31	2.063	90.4	229.4	67.8	0.917
		10.24	25.04	35.28	TWO	0.896	255.2	0.0	109.9										
43760.0	43862.0	0.492	263.4	19.2	27.76	0.714	88.0	0.487	0.678	177.9	343.2	0.347D	1.008	-25.26	2.050	84.5	242.6	-58.4	1.022
		10.55	28.13	38.68	ONE	0.896	255.2	0.0	120.7										
43770.0	43862.0	0.378	260.1	10.6	17.07	0.716	94.2	0.489	0.677	184.4	340.7	0.346D	1.008A	-13.98	2.049	83.7	231.0	-39.1	0.780
		7.96	20.98	28.95	ONE	0.896	255.2	0.0	135.1										
43780.0	43862.0	0.360	253.1	3.1	12.46	0.731	101.5	0.497	0.684	192.2	339.0	0.344D	1.024A	-8.75	2.053	83.1	228.8	-25.8	0.713
		7.58	19.01	26.60	ONE	0.896	255.2	0.0	143.7										
43790.0	43862.0	0.400	245.6	-3.0	10.00	0.769	110.0	0.515	0.709	201.6	338.8	0.344D	1.074A	-5.64	2.066	82.8	227.2	-16.9	0.692
		8.43	18.41	26.84	ONE	0.896	255.2	0.0	147.6										
43800.0	43862.0	0.497	239.9	-7.6	8.55	0.843	119.4	0.553	0.771	213.3	340.6	0.345D	1.198A	-3.49	2.093	83.1	224.3	-10.6	0.685
		10.65	18.18	28.83	ONE	0.896	255.2	0.0	147.5										
								ARRIVAL DATE = 2443864.0											
43720.0	43864.0	0.389	253.6	-43.7	-11.13	0.758	72.4	0.499	0.717	160.3	375.6	0.359	1.075	11.93	2.026	95.2	201.6	51.1	0.536
		8.20	13.83	22.04	TWO	0.942	264.6	0.0	106.6										
43730.0	43864.0	0.391	256.1	-51.1	-14.75	0.746	75.9	0.488	0.706	164.1	370.1	0.362	1.051	16.12	2.021	93.3	214.3	58.5	0.657
		8.24	17.37	25.61	TWO	0.942	264.6	0.0	109.5										
43740.0	43864.0	0.447	253.4	-61.4	-22.59	0.736	79.8	0.479	0.697	168.5	365.4	0.363	1.031	24.52	2.016	91.7	234.5	69.2	0.895
		9.48	24.36	33.85	TWO	0.942	264.6	0.0	107.9										
43770.0	43864.0	0.469	259.9	19.7	25.92	0.729	95.0	0.472	0.686	185.7	350.9	0.362D	1.009A	-22.35	2.010	87.1	242.0	-58.1	0.899
		9.99	24.50	34.50	ONE	0.942	264.6	0.0	119.2										
43780.0	43864.0	0.384	252.2	9.3	15.95	0.747	102.2	0.480	0.695	193.9	349.9	0.362D	1.029A	-11.82	2.015	86.7	231.4	-37.4	0.678
		8.10	18.00	26.10	ONE	0.942	264.6	0.0	131.6										
43790.0	43864.0	0.407	244.0	0.5	11.66	0.786	110.4	0.499	0.723	203.8	350.2	0.362D	1.084A	-6.95	2.029	86.8	227.9	-23.5	0.614
		8.59	16.11	24.70	ONE	0.942	264.6	0.0	137.3										
43800.0	43864.0	0.499	238.4	-5.8	9.38	0.861	119.4	0.541	0.790	215.7	352.4	0.363D	1.217A	-4.04	2.057	87.3	223.6	-14.2	0.591
		10.70	15.43	26.14	ONE	0.942	264.6	0.0	137.0										
								ARRIVAL DATE = 2443866.0											
43720.0	43866.0	0.370	254.9	-39.7	-8.53	0.761	72.7	0.493	0.719	160.2	384.3	0.364	1.073	9.91	1.984	98.0	194.7	46.6	0.466
		7.79	11.80	19.59	TWO	0.986	273.4	0.0	97.7										
43730.0	43866.0	0.354	258.2	-45.0	-10.46	0.750	76.3	0.480	0.709	164.2	378.7	0.369	1.049	12.41	1.980	96.0	206.6	52.3	0.534
		7.45	13.79	21.25	TWO	0.986	273.4	0.0	103.9										
43740.0	43866.0	0.358	258.3	-52.8	-14.01	0.741	80.3	0.469	0.701	168.7	373.9	0.372	1.029	16.49	1.975	94.4	218.2	59.9	0.646
		7.53	17.05	24.59	TWO	0.986	273.4	0.0	106.6										
43750.0	43866.0	0.422	252.5	-63.3	-21.97	0.735	84.9	0.462	0.694	174.0	370.0	0.373	1.015	24.96	1.972	93.1	238.0	71.3	0.877
		8.93	23.85	32.78	TWO	0.986	273.4	0.0	105.1										
43780.0	43866.0	0.451	253.4	17.1	22.69	0.759	102.6	0.467	0.704	195.3	359.8	0.375D	1.033A	-18.18	1.977	89.9	236.3	-55.4	0.749
		9.57	20.08	29.65	ONE	0.986	273.4	0.0	116.9										
43790.0	43866.0	0.424	243.8	4.8	14.18	0.799	110.6	0.488	0.734	205.5	360.6	0.375	1.092A	-9.16	1.991	90.2	227.2	-33.6	0.572
		8.96	14.89	23.85	ONE	0.986	273.4	0.0	125.2										
43800.0	43866.0	0.503	237.7	-3.8	10.47	0.873	119.3	0.533	0.803	217.4	362.9	0.375	1.230A	-4.89	2.021	91.0	221.0	-19.2	0.523
		10.80	13.45	24.25	ONE	0.986	273.4	0.0	125.2										
								ARRIVAL DATE = 2443868.0											
43720.0	43868.0	0.360	255.8	-36.6	-6.73	0.763	72.8	0.490	0.720	160.2	392.3	0.367	1.073	8.71	1.945	100.5	187.4	42.4	0.429
		7.58	10.75	18.33	TWO	1.029	281.6	0.0	86.8										
43730.0	43868.0	0.335	259.3	-40.5	-7.85	0.753	76.6	0.475	0.711	164.2	386.8	0.373	1.049	10.36	1.940	98.6	199.3	47.5	0.468
		7.07	11.86	18.93	TWO	1.029	281.6	0.0	95.1										
43740.0	43868.0	0.320	260.0	-46.0	-9.74	0.744	80.7	0.463	0.703	168.8	382.0	0.378	1.028	12.75	1.936	96.9	209.6	53.3	0.529
		6.79	13.63	20.42	TWO	1.029	281.6	0.0	100.6										
43750.0	43868.0	0.330	256.5	-53.9	-13.30	0.739	85.3	0.454	0.697	174.3	378.0	0.381	1.014	16.78	1.933	95.6	219.7	61.4	0.633
		6.97	16.67	23.64	TWO	1.029	281.6	0.0	103.0										
43760.0	43868.0	0.411	247.0	-64.2	-21.75	0.739	90.5	0.449	0.695	180.6	375.1	0.383	1.007A	25.70	1.932	94.7	238.9	74.2	0.868
		8.67	23.58	32.25	TWO	1.029	281.6	0.0	101.5										
43790.0	43868.0	0.461	245.5	10.7	18.74	0.808	110.7	0.481	0.741	206.6	369.9	0.385	1.097A	-13.43	1.955	93.2	226.0	-49.1	0.600
		9.81	15.69	25.50	ONE	1.029	281.6	0.0	111.7										
43800.0	43868.0	0.509	237.9	-1.4	12.05	0.880	119.2	0.527	0.811	218.5	372.2	0.384	1.238A	-6.26	1.984	94.2	216.9	-26.4	0.485
		10.95	12.36	23.31	ONE	1.029	281.6	0.0	112.4										
								ARRIVAL DATE = 2443870.0											
43720.0	43870.0	0.355	256.6	-34.0	-5.37	0.763	72.7	0.490	0.721	160.0	399.9	0.368	1.074	7.95	1.907	102.9	180.6	38.0	0.418
		7.49	10.43	17.91	TWO	1.070	289.4	0.0	75.3										
43730.0	43870.0	0.325	260.1	-36.9	-6.03	0.754	76.6	0.473	0.712	164.1	394.4	0.376	1.049	9.11	1.903	100.9	192.1	42.9	0.434
		6.88	10.90	17.77	TWO	1.070	289.4	0.0	84.6										
43740.0	43870.0	0.302	261.0	-40.8	-7.11	0.747	80.8	0.459	0.705	168.8	389.7	0.382	1.028	10.65	1.899	99.2	202.1	47.9	0.467
		6.44	11.83	18.26	TWO	1.070	289.4	0.0	91.8										
43750.0	43870.0	0.292	258.1	-46.3	-8.97	0.743	85.5	0.449	0.700	174.4	385.7	0.386	1.014	12.94	1.896	97.9	210.5	53.9	0.520
		6.26	13.39	19.65	TWO	1.070	289.4	0.0	96.5										
43760.0	43870.0	0.313	250.2	-53.8	-12.62	0.743	90.7	0.443	0.698	180.9	382.6	0.389	1.007A	17.00	1.895	96.9	218.0	62.7	0.619
		6.64	16.27	22.91	TWO	1.070	289.4	0.0	98.4										
43770.0	43870.0	0.420	238.5	-63.5	-22.11	0.752	96.7	0.444	0.702	188.5	380.9	0.390	1.013A	26.89	1.897	96.4	234.7	77.7	0.873
		8.87	23.72	32.59	TWO	1.070	289.4	0.0	97.1										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
43790.0	43870.0	0.577	251.3	19.2	29.94	0.813	110.6	0.475	0.746	207.3	377.9	0.392	1.099A	-24.36	1.919	95.8	230.5	-72.7	0.825
		12.62	22.31	34.93	ONE	1.070	289.4	0.0	98.8										
43800.0	43870.0	0.523	235.2	2.1	14.72	0.883	118.9	0.522	0.814	219.1	380.5	0.389	1.239A	-8.73	1.949	97.0	211.4	-36.9	0.488
		11.27	12.46	23.73	ONE	1.070	289.4	0.0	99.6										
ARRIVAL DATE = 2443872.0																			
43720.0	43872.0	0.355	257.4	-31.7	-4.26	0.763	72.4	0.493	0.721	159.8	407.0	0.366	1.076	7.46	1.873	105.1	175.3	33.4	0.426
		7.49	10.66	18.15	TWO	1.108	296.8	0.0	64.1										
43730.0	43872.0	0.321	261.0	-33.9	-4.65	0.755	76.5	0.473	0.713	163.9	401.5	0.376	1.050	8.30	1.868	103.0	185.7	38.2	0.425
		6.80	10.62	17.42	TWO	1.108	296.8	0.0	73.6										
43740.0	43872.0	0.293	261.9	-36.7	-5.29	0.748	80.8	0.457	0.706	168.7	396.8	0.383	1.028	9.34	1.865	101.3	195.1	42.8	0.437
		6.27	10.98	17.24	TWO	1.108	296.8	0.0	81.4										
43750.0	43872.0	0.275	256.3	-40.4	-6.32	0.745	85.5	0.446	0.701	174.4	392.8	0.389	1.014	10.76	1.862	100.0	202.9	47.6	0.464
		5.94	11.74	17.69	TWO	1.108	296.8	0.0	87.4										
43760.0	43872.0	0.275	252.1	-45.2	-8.16	0.746	90.7	0.440	0.700	180.9	389.8	0.392	1.007A	12.96	1.862	99.0	208.8	53.8	0.511
		5.95	13.12	19.07	TWO	1.108	296.8	0.0	91.2										
43770.0	43872.0	0.313	241.3	-51.3	-11.98	0.755	96.6	0.440	0.704	188.6	387.9	0.394	1.014A	17.13	1.864	98.4	212.8	63.3	0.608
		6.64	15.93	22.57	TWO	1.108	296.8	0.0	92.7										
43780.0	43872.0	0.458	231.6	-61.4	-23.47	0.776	103.3	0.450	0.717	197.5	387.4	0.394	1.040A	28.96	1.871	98.4	218.8	81.6	0.906
		9.75	24.69	34.44	TWO	1.108	296.8	0.0	91.7										
43800.0	43872.0	0.561	242.7	8.2	20.41	0.883	118.6	0.518	0.814	219.1	387.7	0.393	1.235A	-14.24	1.915	99.4	205.0	-53.7	0.576
		12.22	15.02	27.24	ONE	1.108	296.8	0.0	88.9										
ARRIVAL DATE = 2443874.0																			
43720.0	43874.0	0.359	258.3	-29.7	-3.32	0.763	71.9	0.498	0.720	159.5	413.6	0.362	1.079	7.14	1.841	107.2	171.6	29.1	0.449
		7.57	11.33	18.90	TWO	1.144	303.8	0.0	54.1										
43730.0	43874.0	0.322	261.9	-31.3	-3.54	0.755	76.1	0.475	0.713	163.6	408.2	0.374	1.051	7.76	1.837	105.1	180.9	33.5	0.433
		6.81	10.87	17.68	TWO	1.144	303.8	0.0	63.0										
43740.0	43874.0	0.290	263.0	-33.3	-3.90	0.748	80.5	0.458	0.706	168.4	403.4	0.383	1.029	8.47	1.833	103.3	189.4	37.6	0.430
		6.21	10.79	17.00	TWO	1.144	303.8	0.0	70.9										
43750.0	43874.0	0.267	260.5	-35.8	-4.49	0.745	85.3	0.445	0.702	174.1	399.5	0.389	1.014	9.39	1.831	101.9	196.6	41.7	0.439
		5.80	11.04	16.84	TWO	1.144	303.8	0.0	77.2										
43760.0	43874.0	0.259	253.8	-38.7	-5.47	0.747	90.6	0.438	0.701	180.8	396.5	0.394	1.007A	10.68	1.830	100.9	201.9	46.3	0.461
		5.67	11.67	17.33	TWO	1.144	303.8	0.0	81.8										
43770.0	43874.0	0.276	243.8	-41.8	-7.28	0.756	96.5	0.438	0.705	188.5	394.5	0.396	1.013A	12.79	1.833	100.3	204.8	52.4	0.504
		5.97	12.90	18.87	TWO	1.144	303.8	0.0	84.5										
43780.0	43874.0	0.337	233.7	-46.4	-11.38	0.777	103.1	0.447	0.718	197.3	393.7	0.397	1.039A	17.17	1.840	100.3	204.1	62.4	0.603
		7.11	15.79	22.90	TWO	1.144	303.8	0.0	85.5										
43790.0	43874.0	0.545	229.6	-59.7	-27.14	0.815	110.5	0.471	0.747	207.4	394.5	0.395	1.099A	33.21	1.854	100.9	169.0	84.4	1.002
		11.81	27.54	39.35	TWO	1.144	303.8	0.0	86.0										
ARRIVAL DATE = 2443876.0																			
43720.0	43876.0	0.367	255.2	-28.0	-2.48	0.762	71.2	0.505	0.720	159.1	419.9	0.356	1.083	6.96	1.812	109.2	169.6	25.3	0.484
		7.73	12.34	20.07	TWO	1.177	310.5	0.0	45.4										
43730.0	43876.0	0.326	263.0	-29.1	-2.58	0.754	75.5	0.480	0.712	163.2	414.4	0.370	1.054	7.40	1.808	107.0	177.7	29.2	0.456
		6.89	11.54	18.43	TWO	1.177	310.5	0.0	53.6										
43740.0	43876.0	0.291	264.2	-30.4	-2.78	0.748	80.1	0.461	0.706	168.0	409.6	0.380	1.031	7.89	1.805	105.1	185.2	32.8	0.441
		6.23	11.10	17.33	TWO	1.177	310.5	0.0	60.9										
43750.0	43876.0	0.264	262.0	-32.0	-3.10	0.745	85.0	0.447	0.701	173.7	405.7	0.388	1.015	8.48	1.802	103.7	191.7	36.2	0.437
		5.76	10.98	16.74	TWO	1.177	310.5	0.0	67.1										
43760.0	43876.0	0.252	255.6	-33.7	-3.63	0.747	90.3	0.438	0.700	180.4	402.7	0.393	1.007A	9.25	1.802	102.7	196.6	39.6	0.443
		5.55	11.15	16.70	TWO	1.177	310.5	0.0	71.8										
43770.0	43876.0	0.262	246.2	-35.0	-4.54	0.756	96.2	0.437	0.704	188.0	400.7	0.396	1.012A	10.39	1.804	102.1	199.4	43.5	0.462
		5.71	11.69	17.40	TWO	1.177	310.5	0.0	74.8										
43780.0	43876.0	0.302	236.8	-36.3	-6.30	0.776	102.7	0.446	0.717	196.9	399.7	0.397	1.037A	12.38	1.811	102.0	199.3	49.0	0.503
		6.43	12.88	19.31	TWO	1.177	310.5	0.0	76.3										
43790.0	43876.0	0.389	230.2	-40.8	-10.82	0.812	110.0	0.468	0.745	206.8	400.0	0.396	1.094A	17.11	1.825	102.5	194.3	59.2	0.610
		8.20	16.01	24.21	TWO	1.177	310.5	0.0	76.9										
ARRIVAL DATE = 2443878.0																			
43720.0	43878.0	0.378	260.2	-26.4	-1.70	0.761	70.2	0.515	0.719	158.7	425.9	0.349	1.089	6.88	1.787	111.2	168.7	22.2	0.529
		7.96	13.63	21.59	TWO	1.208	317.0	0.0	38.1										
43730.0	43878.0	0.333	264.1	-27.1	-1.74	0.753	74.8	0.488	0.711	162.6	420.3	0.364	1.058	7.17	1.783	108.8	175.9	25.4	0.491
		7.04	12.52	19.57	TWO	1.208	317.0	0.0	45.4										
43740.0	43878.0	0.295	265.6	-27.9	-1.83	0.747	79.5	0.466	0.705	167.4	415.4	0.376	1.033	7.48	1.779	106.9	182.6	28.4	0.465
		6.31	11.79	18.10	TWO	1.208	317.0	0.0	52.0										
43750.0	43878.0	0.266	263.7	-28.9	-1.99	0.744	84.4	0.450	0.701	173.1	411.5	0.385	1.016	7.84	1.777	105.4	188.4	31.2	0.451
		5.79	11.38	17.17	TWO	1.208	317.0	0.0	57.8										
43760.0	43878.0	0.250	257.8	-29.7	-2.26	0.745	89.8	0.440	0.699	179.7	408.4	0.391	1.007	8.29	1.776	104.3	192.9	33.8	0.447
		5.52	11.25	16.77	TWO	1.208	317.0	0.0	62.2										
43770.0	43878.0	0.255	248.8	-30.1	-2.70	0.754	95.7	0.438	0.703	187.4	406.3	0.395	1.011A	8.90	1.778	103.7	195.6	36.2	0.452
		5.60	11.41	17.01	TWO	1.208	317.0	0.0	65.2										
43780.0	43878.0	0.288	239.7	-29.9	-3.48	0.773	102.2	0.446	0.715	196.1	405.3	0.396	1.034A	9.84	1.785	103.6	196.1	39.0	0.471
		6.18	11.95	18.14	TWO	1.208	317.0	0.0	66.5										
43790.0	43878.0	0.355	233.4	-30.6	-5.13	0.808	109.4	0.467	0.741	205.9	405.3	0.395	1.087A	11.63	1.799	104.0	193.7	43.2	0.514
		7.49	13.20	20.69	TWO	1.208	317.0	0.0	66.4										
43800.0	43878.0	0.473	230.4	-36.0	-10.29	0.867	117.2	0.509	0.796	216.7	406.3	0.391	1.201A	16.95	1.824	105.2	186.2	53.4	0.639
		10.08	16.84	26.92	TWO	1.208	317.0	0.0	67.1										
ARRIVAL DATE = 2443880.0																			
43720.0	43880.0	0.392	261.1	-24.9	-0.96	0.759	69.0	0.528	0.717	158.3	431.6	0.339	1.096	6.88	1.764	113.2	168.9	19.5	0.581
		8.27	15.15	23.42	TWO	1.236	323.2	0.0	31.9										
43730.0	43880.0	0.344	265.4	-25.4	-0.96	0.751	73.8	0.497	0.710	162.1	425.8	0.357	1.063	7.04	1.760	110.7	175.3	22.2	0.533
		7.26	13.77	21.03	TWO	1.236	323.2	0.0	38.4										
43740.0	43880.0	0.303	267.2	-25.8	-0.99	0.745	78.6	0.473	0.703	166.7	420.9	0.371	1.036	7.21	1.756	108.6	181.2	24.7	0.499
		6.46	12.78	19.23	TWO	1.236	323.2	0.0	44.4										
43750.0	43880.0	0.271	265.7	-26.3	-1.06	0.742	83.7	0.455	0.699	172.3	416.9	0.381	1.017	7.39	1.754	107.0	186.4	26.9	0.477
		5.87	12.13	17.99	TWO	1.236	323.2	0.0	49.5										
43760.0	43880.0	0.251	260.2	-26.6	-1.17	0.743	89.1	0.444	0.698	178.9	413.7	0.388	1.008	7.61	1.753	105.8	190.6	28.8	0.465
		5.54	11.77	17.31	TWO	1.236	323.2	0.0	53.6										
43770.0	43880.0	0.253	251.6	-26.4	-1.35	0.751	95.0	0.440	0.701	186.5	411.6	0.392	1.010A	7.89	1.755	105.2	193.2	30.2	0.462
		5.56	11.70	17.26	TWO	1.236	323.2	0.0	56.3										
43780.0	43880.0	0.282	242.7	-25.6	-1.65	0.769	101.6	0.446	0.712	195.1	410.4	0.394	1.030A	8.29	1.761	105.0	194.1	31.4	0.470
		6.06	11.94	18.00	TWO	1.236	323.2	0.0	57.4										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
43790.0	43880.0	0.342	236.4	-24.9	-2.22	0.802	108.7	0.466	0.736	204.8	410.2	0.393	1.079A	8.95	1.774	105.4	192.8	32.6	0.494
		7.22	12.63	19.85	TWO	1.236	323.2	0.0	57.0										
43800.0	43880.0	0.438	233.6	-25.7	-3.56	0.858	116.4	0.506	0.786	215.3	410.9	0.389	1.184A	10.37	1.799	106.6	189.4	34.7	0.545
		9.29	14.11	23.40	TWO	1.236	323.2	0.0	55.3										
43810.0	43880.0	0.589	233.4	-32.5	-9.72	0.948	124.6	0.575	0.897	226.5	412.2	0.381	1.412A	16.61	1.842	108.6	181.3	45.7	0.698
		12.92	18.57	31.49	TWO	1.236	323.2	0.0	56.6										
								ARRIVAL DATE = 2443882.0											
43720.0	43882.0	0.411	262.1	-23.6	-0.23	0.757	67.6	0.543	0.716	157.8	437.1	0.327	1.104	6.96	1.745	115.3	169.7	17.4	0.640
		8.67	16.87	25.54	TWO	1.263	329.2	0.0	26.7										
43730.0	43882.0	0.359	266.7	-23.9	-0.23	0.749	72.6	0.509	0.708	161.4	431.1	0.347	1.069	7.00	1.741	112.5	175.5	19.6	0.584
		7.55	15.22	22.78	TWO	1.263	329.2	0.0	32.4										
43740.0	43882.0	0.314	268.9	-24.0	-0.23	0.742	77.6	0.482	0.702	166.0	426.1	0.363	1.040	7.04	1.737	110.2	180.9	21.6	0.542
		6.66	14.00	20.66	TWO	1.263	329.2	0.0	37.8										
43750.0	43882.0	0.278	267.9	-24.1	-0.24	0.739	82.8	0.462	0.697	171.4	421.9	0.375	1.019	7.08	1.734	108.5	185.7	23.3	0.512
		6.00	13.14	19.13	TWO	1.263	329.2	0.0	42.4										
43760.0	43882.0	0.256	263.0	-24.0	-0.26	0.740	88.3	0.449	0.696	177.9	418.7	0.383	1.008	7.13	1.733	107.3	189.5	24.6	0.493
		5.61	12.59	18.20	TWO	1.263	329.2	0.0	46.1										
43770.0	43882.0	0.253	254.7	-23.6	-0.29	0.747	94.2	0.444	0.698	185.3	416.4	0.388	1.008A	7.18	1.735	106.5	192.1	25.4	0.484
		5.56	12.34	17.91	TWO	1.263	329.2	0.0	48.6										
43780.0	43882.0	0.278	245.8	-22.5	-0.34	0.764	100.8	0.448	0.708	193.8	415.1	0.391	1.026A	7.26	1.741	106.3	193.2	25.7	0.487
		5.99	12.42	18.41	TWO	1.263	329.2	0.0	49.6										
43790.0	43882.0	0.334	239.3	-21.5	-0.44	0.795	107.9	0.466	0.730	203.3	414.7	0.390	1.070A	7.37	1.753	106.7	192.6	25.3	0.503
		7.05	12.89	19.94	TWO	1.263	329.2	0.0	49.0										
43800.0	43882.0	0.424	236.4	-21.0	-0.62	0.847	115.6	0.503	0.775	213.7	415.2	0.386	1.165A	7.58	1.776	107.8	190.4	24.4	0.539
		8.96	13.93	22.89	TWO	1.263	329.2	0.0	46.8										
43810.0	43882.0	0.553	236.7	-21.5	-1.13	0.932	123.7	0.567	0.873	224.6	416.2	0.378	1.368A	8.11	1.816	109.7	186.9	23.5	0.605
		12.02	15.86	27.88	TWO	1.263	329.2	0.0	43.5										
								ARRIVAL DATE = 2443884.0											
43720.0	43884.0	0.433	263.0	-22.5	0.50	0.755	65.9	0.561	0.714	157.4	442.5	0.313	1.115	7.12	1.729	117.4	171.0	15.6	0.705
		9.16	18.79	27.96	TWO	1.287	335.0	0.0	22.2										
43730.0	43884.0	0.376	268.0	-22.5	0.49	0.746	71.1	0.524	0.706	160.7	436.3	0.336	1.076	7.03	1.724	114.4	176.4	17.5	0.640
		7.92	16.88	24.80	TWO	1.287	335.0	0.0	27.4										
43740.0	43884.0	0.328	270.6	-22.4	0.49	0.740	76.3	0.494	0.700	165.1	431.0	0.354	1.045	6.95	1.720	111.9	181.4	19.1	0.590
		6.93	15.42	22.35	TWO	1.287	335.0	0.0	32.2										
43750.0	43884.0	0.288	270.2	-22.2	0.50	0.736	81.7	0.471	0.695	170.4	426.7	0.367	1.022	6.87	1.718	110.0	185.8	20.4	0.554
		6.18	14.36	20.54	TWO	1.287	335.0	0.0	36.4										
43760.0	43884.0	0.262	266.0	-21.9	0.53	0.736	87.3	0.456	0.693	176.7	423.3	0.377	1.009	6.78	1.716	108.7	189.4	21.3	0.529
		5.72	13.64	19.36	TWO	1.287	335.0	0.0	39.7										
43770.0	43884.0	0.255	258.2	-21.3	0.58	0.743	93.3	0.449	0.695	184.0	420.9	0.383	1.007A	6.67	1.718	107.8	191.9	21.6	0.516
		5.60	13.25	18.85	TWO	1.287	335.0	0.0	42.0										
43780.0	43884.0	0.275	249.3	-20.3	0.66	0.758	99.8	0.451	0.704	192.4	419.4	0.386	1.021A	6.54	1.723	107.5	193.2	21.3	0.514
		5.95	13.20	19.14	TWO	1.287	335.0	0.0	42.9										
43790.0	43884.0	0.327	242.4	-19.1	0.80	0.787	106.9	0.467	0.723	201.7	418.9	0.386	1.061A	6.35	1.734	107.8	193.0	20.3	0.526
		6.91	13.55	20.47	TWO	1.287	335.0	0.0	42.4										
43800.0	43884.0	0.412	239.1	-18.4	1.06	0.836	114.6	0.500	0.764	211.8	419.1	0.382	1.146A	6.05	1.755	108.9	191.6	18.3	0.557
		8.70	14.45	23.15	TWO	1.287	335.0	0.0	40.3										
43810.0	43884.0	0.536	239.2	-18.0	1.63	0.915	122.8	0.560	0.850	222.5	419.9	0.374	1.325A	5.43	1.792	110.7	189.1	15.0	0.614
		11.59	16.11	27.70	TWO	1.287	335.0	0.0	36.9										
								ARRIVAL DATE = 2443886.0											
43720.0	43886.0	0.459	263.9	-21.5	1.26	0.753	63.8	0.583	0.712	157.0	447.8	0.297	1.128	7.35	1.716	119.7	172.6	14.2	0.778
		9.76	20.92	30.69	TWO	1.308	340.7	0.0	18.4										
43730.0	43886.0	0.397	269.3	-21.3	1.20	0.744	69.4	0.541	0.704	160.1	441.3	0.323	1.085	7.14	1.711	116.3	177.8	15.7	0.703
		8.38	18.72	27.10	TWO	1.308	340.7	0.0	23.0										
43740.0	43886.0	0.345	272.4	-21.0	1.18	0.737	74.8	0.508	0.697	164.2	435.8	0.343	1.052	6.94	1.707	113.6	182.5	17.0	0.645
		7.27	17.03	24.30	TWO	1.308	340.7	0.0	27.4										
43750.0	43886.0	0.302	272.7	-20.6	1.19	0.732	80.3	0.482	0.692	169.3	431.2	0.359	1.026	6.74	1.704	111.6	186.6	18.0	0.602
		6.43	15.76	22.19	TWO	1.308	340.7	0.0	31.2										
43760.0	43886.0	0.271	269.2	-20.1	1.24	0.732	86.0	0.464	0.690	175.4	427.7	0.370	1.010	6.53	1.702	110.1	190.0	18.6	0.571
		5.87	14.87	20.74	TWO	1.308	340.7	0.0	34.2										
43770.0	43886.0	0.259	262.0	-19.5	1.33	0.737	92.1	0.455	0.691	182.5	425.1	0.377	1.006A	6.29	1.703	109.1	192.5	18.6	0.553
		5.67	14.34	20.01	TWO	1.308	340.7	0.0	36.3										
43780.0	43886.0	0.274	253.1	-18.5	1.48	0.751	98.7	0.455	0.698	190.7	423.4	0.380	1.016A	6.01	1.708	108.7	193.9	18.0	0.548
		5.93	14.18	20.10	TWO	1.308	340.7	0.0	37.3										
43790.0	43886.0	0.320	245.8	-17.5	1.73	0.778	105.8	0.468	0.716	199.8	422.7	0.381	1.051A	5.64	1.718	108.9	194.1	16.7	0.557
		6.79	14.44	21.23	TWO	1.308	340.7	0.0	36.9										
43800.0	43886.0	0.401	241.9	-16.8	2.16	0.823	113.5	0.498	0.752	209.7	422.7	0.377	1.126A	5.09	1.737	109.8	193.2	14.4	0.585
		8.45	15.26	23.71	TWO	1.308	340.7	0.0	35.2										
43810.0	43886.0	0.519	241.6	-16.4	3.01	0.896	121.7	0.553	0.827	220.2	423.3	0.370	1.284A	4.14	1.771	111.6	191.3	10.7	0.639
		11.17	16.83	28.01	TWO	1.308	340.7	0.0	32.3										
								ARRIVAL DATE = 2443888.0											
43720.0	43888.0	0.490	264.6	-20.6	2.06	0.750	61.5	0.608	0.711	156.8	453.1	0.279	1.143	7.67	1.706	122.1	174.4	13.0	0.858
		10.49	23.28	33.77	TWO	1.328	346.4	0.0	15.3										
43730.0	43888.0	0.423	270.5	-20.3	1.93	0.741	67.4	0.562	0.702	159.4	446.2	0.308	1.097	7.31	1.701	118.4	179.5	14.3	0.773
		8.94	20.77	29.71	TWO	1.328	346.4	0.0	19.3										
43740.0	43888.0	0.365	274.2	-19.8	1.86	0.733	73.1	0.524	0.695	163.2	440.4	0.330	1.060	6.99	1.696	115.4	184.0	15.3	0.706
		7.70	18.81	26.51	TWO	1.328	346.4	0.0	23.2										
43750.0	43888.0	0.318	275.2	-19.2	1.85	0.728	78.8	0.495	0.690	168.1	435.6	0.348	1.031	6.68	1.693	113.1	188.0	16.0	0.656
		6.74	17.33	24.07	TWO	1.328	346.4	0.0	26.7										
43760.0	43888.0	0.283	272.5	-18.6	1.89	0.727	84.6	0.475	0.687	174.0	431.8	0.361	1.012	6.36	1.691	111.5	191.3	16.4	0.619
		6.08	16.26	22.34	TWO	1.328	346.4	0.0	29.5										
43770.0	43888.0	0.266	266.1	-17.9	1.99	0.731	90.8	0.463	0.687	180.9	429.0	0.369	1.005A	6.01	1.691	110.3	193.7	16.2	0.596
		5.78	15.59	21.37	TWO	1.328	346.4	0.0	31.5										
43780.0	43888.0	0.274	257.4	-17.1	2.17	0.744	97.4	0.461	0.693	188.9	427.2	0.374	1.012A	5.62	1.695	109.8	195.2	15.4	0.586
		5.93	15.31	21.24	TWO	1.328	346.4	0.0	32.4										
43790.0	43888.0	0.315	249.5	-16.2	2.47	0.768	104.6	0.471	0.708	197.7	426.3	0.375	1.041A	5.12	1.704	109.9	195.7	14.0	0.592
		6.68	15.48	22.15	TWO	1.328	346.4	0.0	32.2										
43800.0	43888.0	0.389	245.0	-15.7	2.96	0.810	112.3	0.497	0.739	207.5	426.1	0.372	1.107A	4.44	1.722	110.7	195.2	11.7	0.617
		8.20	16.21	24.41	TWO	1.328	346.4	0.0	30.9										
43810.0	43888.0	0.501	244.0	-15.4	3.85	0.878	120.5	0.546	0.805	217.8	426.5	0.365	1.244A	3.38	1.753	112.3	193.8	8.2	0.668
		10.75	17.70	28.45	TWO	1.328	346.4	0.0	28.5										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2443890.0											
43720.0	43890.0	0.526	265.2	-19.8	2.94	0.748	58.7	0.637	0.709	156.7	458.6	0.257	1.160	8.10	1.699	124.8	176.4	12.0	0.946
		11.36	25.89	37.26	TWO	1.345	351.9	0.0	12.8										
43730.0	43890.0	0.453	271.6	-19.5	2.70	0.738	65.1	0.586	0.700	158.9	451.2	0.290	1.110	7.57	1.693	120.7	181.4	13.1	0.849
		9.62	23.03	32.65	TWO	1.345	351.9	0.0	16.1										
43740.0	43890.0	0.390	276.0	-18.8	2.56	0.730	71.0	0.544	0.692	162.3	445.0	0.316	1.069	7.11	1.689	117.4	185.8	13.9	0.773
		8.21	20.79	29.00	TWO	1.345	351.9	0.0	19.6										
43750.0	43890.0	0.337	277.7	-18.0	2.50	0.724	77.0	0.511	0.687	166.8	439.9	0.336	1.038	6.68	1.685	114.8	189.7	14.4	0.715
		7.12	19.07	26.19	TWO	1.345	351.9	0.0	22.7										
43760.0	43890.0	0.297	276.0	-17.3	2.51	0.722	83.0	0.487	0.683	172.5	435.9	0.350	1.016	6.26	1.683	112.9	192.9	14.6	0.672
		6.35	17.81	24.16	TWO	1.345	351.9	0.0	25.4										
43770.0	43890.0	0.274	270.4	-16.6	2.60	0.725	89.2	0.472	0.683	179.2	432.8	0.360	1.005	5.82	1.683	111.6	195.4	14.3	0.643
		5.93	16.98	22.91	TWO	1.345	351.9	0.0	27.3										
43780.0	43890.0	0.276	262.0	-15.9	2.78	0.735	95.9	0.467	0.687	186.9	430.8	0.366	1.008A	5.32	1.686	110.9	197.0	13.4	0.629
		5.96	16.56	22.53	TWO	1.345	351.9	0.0	28.3										
43790.0	43890.0	0.310	253.7	-15.2	3.08	0.757	103.2	0.474	0.700	195.5	429.6	0.368	1.032A	4.74	1.693	110.9	197.7	11.9	0.631
		6.58	16.62	23.20	TWO	1.345	351.9	0.0	28.3										
43800.0	43890.0	0.378	248.3	-14.8	3.58	0.795	110.9	0.497	0.727	205.0	429.2	0.366	1.089A	3.98	1.709	111.6	197.5	9.7	0.653
		7.96	17.25	25.21	TWO	1.345	351.9	0.0	27.3										
43810.0	43890.0	0.483	246.6	-14.7	4.43	0.858	119.2	0.541	0.783	215.2	429.4	0.360	1.207A	2.88	1.738	113.0	196.5	6.6	0.700
		10.32	18.64	28.96	TWO	1.345	351.9	0.0	25.4										
								ARRIVAL DATE = 2443892.0											
43720.0	43892.0	0.568	265.6	-19.1	3.91	0.746	55.6	0.670	0.707	156.9	464.2	0.234	1.181	8.65	1.695	127.8	178.5	11.1	1.045
		12.40	28.80	41.20	TWO	1.361	357.4	0.0	11.2										
43730.0	43892.0	0.488	272.6	-18.7	3.52	0.735	62.3	0.613	0.698	158.5	456.3	0.270	1.126	7.92	1.689	123.2	183.5	12.0	0.934
		10.43	25.54	35.97	TWO	1.361	357.4	0.0	13.4										
43740.0	43892.0	0.419	277.6	-18.0	3.27	0.726	68.7	0.567	0.690	161.4	449.6	0.299	1.081	7.30	1.684	119.5	187.9	12.7	0.848
		8.84	22.98	31.82	TWO	1.361	357.4	0.0	16.4										
43750.0	43892.0	0.361	280.1	-17.0	3.15	0.719	74.9	0.530	0.683	165.6	444.2	0.321	1.046	6.75	1.680	116.6	191.7	13.1	0.780
		7.60	20.99	28.59	TWO	1.361	357.4	0.0	19.3										
43760.0	43892.0	0.315	279.3	-16.1	3.11	0.716	81.1	0.502	0.679	170.9	439.8	0.338	1.020	6.22	1.678	114.4	194.9	13.1	0.730
		6.68	19.51	26.20	TWO	1.361	357.4	0.0	21.7										
43770.0	43892.0	0.286	274.8	-15.4	3.17	0.718	87.5	0.484	0.678	177.3	436.5	0.350	1.006	5.68	1.677	112.9	197.4	12.7	0.695
		6.14	18.50	24.64	TWO	1.361	357.4	0.0	23.5										
43780.0	43892.0	0.280	266.9	-14.8	3.32	0.727	94.3	0.475	0.681	184.8	434.1	0.357	1.005A	5.11	1.679	112.0	199.2	11.8	0.676
		6.04	17.94	23.97	TWO	1.361	357.4	0.0	24.6										
43790.0	43892.0	0.306	258.3	-14.3	3.61	0.746	101.6	0.479	0.692	193.2	432.7	0.360	1.023A	4.45	1.686	111.8	200.1	10.4	0.674
		6.51	17.87	24.38	TWO	1.361	357.4	0.0	24.8										
43800.0	43892.0	0.367	252.1	-14.1	4.08	0.780	109.4	0.498	0.715	202.5	432.1	0.359	1.071A	3.64	1.699	112.3	200.1	8.3	0.691
		7.72	18.38	26.10	TWO	1.361	357.4	0.0	24.1										
43810.0	43892.0	0.464	249.5	-14.2	4.87	0.838	117.7	0.537	0.763	212.4	432.1	0.354	1.172A	2.53	1.725	113.7	199.4	5.5	0.734
		9.88	19.64	29.52	TWO	1.361	357.4	0.0	22.6										
								ARRIVAL DATE = 2443894.0											
43730.0	43894.0	0.528	273.4	-18.1	4.42	0.732	59.2	0.645	0.696	158.3	461.5	0.247	1.145	8.38	1.688	125.9	185.6	11.2	1.029
		11.40	28.34	39.74	TWO	1.374	3.0	0.0	11.5										
43740.0	43894.0	0.452	279.0	-17.3	4.04	0.722	66.0	0.593	0.687	160.7	454.4	0.280	1.095	7.57	1.683	121.8	190.1	11.7	0.930
		9.60	25.40	35.01	TWO	1.374	3.0	0.0	13.7										
43750.0	43894.0	0.388	282.4	-16.2	3.81	0.715	72.5	0.551	0.680	164.4	448.5	0.305	1.055	6.88	1.678	118.5	194.0	12.0	0.852
		8.18	23.12	31.29	TWO	1.374	3.0	0.0	16.2										
43760.0	43894.0	0.336	282.6	-15.2	3.71	0.710	78.9	0.520	0.675	169.3	443.7	0.324	1.026	6.24	1.675	116.0	197.2	11.9	0.794
		7.11	21.39	28.50	TWO	1.374	3.0	0.0	18.5										
43770.0	43894.0	0.301	279.2	-14.4	3.71	0.711	85.5	0.497	0.673	175.4	440.1	0.338	1.008	5.61	1.674	114.3	199.8	11.4	0.752
		6.41	20.17	26.58	TWO	1.374	3.0	0.0	20.2										
43780.0	43894.0	0.287	272.1	-13.8	3.83	0.717	92.4	0.486	0.675	182.6	437.4	0.347	1.003A	4.95	1.675	113.2	201.6	10.5	0.727
		6.16	19.43	25.59	TWO	1.374	3.0	0.0	21.3										
43790.0	43894.0	0.304	263.4	-13.5	4.08	0.734	99.8	0.486	0.683	190.7	435.8	0.352	1.015A	4.23	1.680	112.8	202.7	9.1	0.720
		6.47	19.21	25.68	TWO	1.374	3.0	0.0	21.7										
43800.0	43894.0	0.356	256.3	-13.6	4.51	0.765	107.7	0.500	0.703	199.7	434.9	0.351	1.055A	3.38	1.693	113.1	203.0	7.2	0.732
		7.50	19.58	27.08	TWO	1.374	3.0	0.0	21.2										
43810.0	43894.0	0.446	252.8	-13.8	5.21	0.818	116.1	0.533	0.744	209.5	434.7	0.347	1.140A	2.28	1.715	114.3	202.5	4.6	0.770
		9.46	20.69	30.14	TWO	1.374	3.0	0.0	20.1										
43820.0	43894.0	0.577	252.7	-14.2	6.41	0.902	124.8	0.593	0.830	219.6	434.9	0.338	1.322A	0.71	1.756	116.4	201.5	1.3	0.842
		12.61	22.80	35.41	TWO	1.374	3.0	0.0	18.6										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2444308.0											
44160.0	44308.0	0.491	331.1	12.4	15.08	0.796	66.0	0.527	0.730	153.5	312.9	0.345D	1.114	-9.53	1.946	74.1	264.5	-18.9	0.957
		10.52	26.20	36.73	ONE	0.619	282.3	0.0	154.3										
44170.0	44308.0	0.455	340.5	9.7	10.46	0.778	67.2	0.534	0.712	156.3	305.9	0.332D	1.091	-4.43	1.937	71.8	266.5	-8.3	0.983
		9.68	26.96	36.65	ONE	0.619	282.3	0.0	162.2										
44180.0	44308.0	0.436	347.7	9.2	8.17	0.757	68.7	0.542	0.693	159.2	299.0	0.317D	1.069	-1.63	1.928	69.4	269.2	-2.8	1.036
		9.24	28.54	37.78	ONE	0.619	282.3	0.0	166.7										
44190.0	44308.0	0.423	353.6	9.5	6.86	0.734	70.5	0.553	0.675	162.3	292.2	0.302D	1.048	0.22	1.918	67.0	272.0	0.4	1.095
		8.93	30.30	39.24	ONE	0.619	282.3	0.0	169.7										
44200.0	44308.0	0.411	358.1	10.1	6.07	0.708	72.8	0.566	0.656	165.7	285.5	0.285D	1.028	1.60	1.907	64.7	274.7	2.4	1.157
		8.69	32.12	40.81	ONE	0.619	282.3	0.0	172.1										
44210.0	44308.0	0.403	1.3	10.6	5.59	0.680	76.0	0.581	0.639	169.3	279.1	0.268D	1.009	2.73	1.896	62.3	277.3	3.8	1.218
		8.49	33.94	42.44	ONE	0.619	282.3	0.0	173.7										
44220.0	44308.0	0.398	2.7	10.6	5.34	0.652	80.4	0.598	0.622	173.4	273.0	0.250D	0.994	3.73	1.885	59.9	279.7	4.8	1.280
		8.39	35.76	44.15	ONE	0.619	282.3	0.0	174.6										
44230.0	44308.0	0.401	2.0	9.8	5.26	0.625	86.5	0.617	0.609	177.8	267.4	0.233D	0.985	4.67	1.875	57.6	281.9	5.5	1.341
		8.47	37.59	46.06	ONE	0.619	282.3	0.0	174.5										
44240.0	44308.0	0.421	359.2	8.0	5.35	0.608	95.2	0.640	0.601	182.9	262.3	0.216D	0.986A	5.62	1.869	55.2	284.0	6.1	1.404
		8.91	39.46	48.37	ONE	0.619	282.3	0.0	173.6										
44250.0	44308.0	0.472	354.6	5.3	5.63	0.615	107.0	0.668	0.604	189.0	258.2	0.201D	1.008A	6.63	1.872	52.9	285.7	6.7	1.472
		10.06	41.48	51.54	ONE	0.619	282.3	0.0	172.5										
44260.0	44308.0	0.575	349.7	2.2	6.13	0.675	121.6	0.704	0.634	196.5	255.7	0.188D	1.081A	7.79	1.893	50.4	286.9	7.3	1.553
		12.56	43.88	56.44	ONE	0.619	282.3	0.0	171.3										
								ARRIVAL DATE = 2444310.0											
44160.0	44310.0	0.517	326.2	19.2	20.77	0.805	67.6	0.502	0.737	153.0	320.0	0.368D	1.107	-14.98	1.913	76.9	270.1	-31.1	0.933
		11.15	25.51	36.66	ONE	0.623	290.0	0.0	143.6										
44170.0	44310.0	0.440	338.8	13.1	12.02	0.789	69.0	0.505	0.720	155.8	313.2	0.357D	1.084	-5.82	1.904	74.7	269.9	-12.0	0.893
		9.34	24.32	33.65	ONE	0.623	290.0	0.0	156.7										
44180.0	44310.0	0.411	346.9	11.0	8.58	0.770	70.6	0.511	0.703	158.8	306.4	0.344D	1.062	-1.96	1.895	72.5	272.5	-3.8	0.933
		8.68	25.50	34.19	ONE	0.623	290.0	0.0	162.1										
44190.0	44310.0	0.393	353.0	10.6	6.82	0.750	72.5	0.519	0.686	162.0	299.7	0.330D	1.042	0.25	1.886	70.3	275.4	0.4	0.986
		8.29	27.07	35.35	ONE	0.623	290.0	0.0	165.4										
44200.0	44310.0	0.379	357.6	10.7	5.80	0.728	74.9	0.529	0.669	165.6	293.2	0.315D	1.023	1.75	1.876	68.1	278.2	2.9	1.041
		7.98	28.70	36.68	ONE	0.623	290.0	0.0	167.8										
44210.0	44310.0	0.368	0.5	10.8	5.18	0.705	78.0	0.541	0.653	169.4	287.0	0.300D	1.006	2.90	1.866	65.9	280.8	4.5	1.096
		7.75	30.32	38.07	ONE	0.623	290.0	0.0	169.8										
44220.0	44310.0	0.361	1.4	10.5	4.81	0.681	82.3	0.555	0.638	173.7	281.1	0.284D	0.992	3.85	1.857	63.8	283.2	5.6	1.150
		7.61	31.92	39.53	ONE	0.623	290.0	0.0	171.2										
44230.0	44310.0	0.363	0.2	9.3	4.63	0.661	88.1	0.571	0.626	178.6	275.8	0.269D	0.984	4.71	1.849	61.8	285.4	6.4	1.203
		7.65	33.50	41.15	ONE	0.623	290.0	0.0	172.1										
44240.0	44310.0	0.382	356.7	7.1	4.59	0.650	96.0	0.591	0.621	184.2	271.3	0.254D	0.987A	5.53	1.845	59.8	287.3	7.0	1.257
		8.05	35.09	43.14	ONE	0.623	290.0	0.0	172.5										
44250.0	44310.0	0.431	351.7	4.0	4.71	0.662	106.4	0.615	0.627	190.9	267.9	0.241D	1.012A	6.36	1.849	57.8	288.7	7.6	1.313
		9.13	36.76	45.89	ONE	0.623	290.0	0.0	172.3										
44260.0	44310.0	0.531	346.7	0.7	4.99	0.719	119.1	0.649	0.660	199.5	266.3	0.232D	1.088A	7.27	1.871	55.9	289.6	8.2	1.379
		11.47	38.71	50.18	ONE	0.623	290.0	0.0	171.8										
								ARRIVAL DATE = 2444312.0											
44170.0	44312.0	0.441	335.7	17.9	14.84	0.798	70.5	0.480	0.728	155.4	320.1	0.379D	1.078	-8.49	1.874	77.3	273.1	-19.1	0.826
		9.34	22.33	31.67	ONE	0.633	297.4	0.0	149.5										
44180.0	44312.0	0.391	345.8	13.1	9.17	0.782	72.2	0.484	0.712	158.5	313.5	0.368D	1.057	-2.48	1.866	75.2	275.2	-5.3	0.840
		8.25	22.77	31.01	ONE	0.633	297.4	0.0	157.3										
44190.0	44312.0	0.368	352.4	11.5	6.76	0.764	74.2	0.489	0.696	161.9	306.9	0.356D	1.037	0.29	1.857	73.2	278.2	0.6	0.886
		7.74	24.12	31.86	ONE	0.633	297.4	0.0	160.9										
44200.0	44312.0	0.351	356.9	11.1	5.48	0.745	76.6	0.496	0.680	165.6	300.6	0.343D	1.018	1.96	1.848	71.2	281.1	3.7	0.936
		7.39	25.58	32.97	ONE	0.633	297.4	0.0	163.4										
44210.0	44312.0	0.338	359.5	10.7	4.72	0.725	79.8	0.506	0.666	169.7	294.6	0.329D	1.002	3.13	1.839	69.2	283.8	5.5	0.985
		7.13	27.03	34.16	ONE	0.633	297.4	0.0	165.4										
44220.0	44312.0	0.329	0.0	10.0	4.27	0.706	83.9	0.517	0.653	174.3	289.0	0.315D	0.990	4.05	1.831	67.3	286.2	6.6	1.032
		6.97	28.44	35.40	ONE	0.633	297.4	0.0	167.1										
44230.0	44312.0	0.331	358.1	8.3	4.00	0.691	89.4	0.530	0.643	179.5	284.1	0.302D	0.984	4.83	1.825	65.5	288.4	7.4	1.078
		6.99	29.80	36.79	ONE	0.633	297.4	0.0	168.3										
44240.0	44312.0	0.350	354.0	5.7	3.89	0.686	96.7	0.547	0.639	185.6	280.0	0.290D	0.989A	5.54	1.822	63.8	290.1	8.1	1.124
		7.37	31.14	38.51	ONE	0.633	297.4	0.0	169.1										
44250.0	44312.0	0.399	348.7	2.3	3.89	0.701	106.1	0.568	0.649	193.1	277.3	0.280D	1.017A	6.23	1.828	62.3	291.3	8.6	1.170
		8.41	32.51	40.93	ONE	0.633	297.4	0.0	169.5										
44260.0	44312.0	0.497	343.7	-1.0	4.03	0.758	117.4	0.601	0.686	202.6	276.7	0.274D	1.098A	6.94	1.851	60.9	291.8	9.2	1.223
		10.65	34.08	44.73	ONE	0.633	297.4	0.0	169.2										
								ARRIVAL DATE = 2444314.0											
44170.0	44314.0	0.490	328.8	25.6	21.86	0.806	71.7	0.459	0.735	155.2	326.8	0.398D	1.073	-15.38	1.846	79.7	278.2	-35.4	0.832
		10.49	22.53	33.02	ONE	0.648	304.4	0.0	137.0										
44180.0	44314.0	0.378	344.2	15.8	10.15	0.792	73.5	0.460	0.720	158.4	320.3	0.389D	1.051	-3.39	1.839	77.8	277.3	-8.0	0.758
		7.96	20.35	28.31	ONE	0.648	304.4	0.0	151.8										
44190.0	44314.0	0.346	351.6	12.4	6.69	0.776	75.6	0.463	0.705	161.9	313.9	0.379D	1.032	0.36	1.831	75.8	280.4	0.8	0.796
		7.29	21.45	28.74	ONE	0.648	304.4	0.0	156.0										
44200.0	44314.0	0.326	356.2	11.1	5.09	0.760	78.1	0.468	0.691	165.8	307.7	0.368D	1.014	2.25	1.822	73.9	283.5	4.7	0.840
		6.90	22.77	29.66	ONE	0.648	304.4	0.0	158.6										
44210.0	44314.0	0.311	358.6	10.3	4.21	0.743	81.3	0.475	0.677	170.1	302.0	0.356D	0.999	3.45	1.815	72.2	286.3	6.8	0.884
		6.61	24.06	30.67	ONE	0.648	304.4	0.0	160.8										
44220.0	44314.0	0.302	358.6	9.1	3.69	0.728	85.3	0.483	0.666	175.0	296.7	0.344D	0.988	4.32	1.808	70.5	288.7	8.0	0.926
		6.44	25.30	31.74	ONE	0.648	304.4	0.0	162.5										
44230.0	44314.0	0.304	356.0	7.0	3.37	0.717	90.6	0.494	0.658	180.6	292.1	0.333D	0.984A	5.02	1.803	68.9	290.8	8.8	0.966
		6.47	26.47	32.93	ONE	0.648	304.4	0.0	163.9										
44240.0	44314.0	0.323	351.3	3.9	3.20	0.716	97.3	0.508	0.657	187.2	288.6	0.323D	0.991A	5.63	1.802	67.5	292.4	9.4	1.004
		6.85	27.59	34.44	ONE	0.648	304.4	0.0	164.9										
44250.0	44314.0	0.374	345.7	0.3	3.14	0.735	105.9	0.528	0.669	195.4	286.6	0.316D	1.023A	6.20	1.810	66.3	293.4	9.9	1.042
		7.88	28.71	36.59	ONE	0.648	304.4	0.0	165.3										
44260.0	44314.0	0.471	340.9	-2.9	3.18	0.791	116.2	0.560	0.711	205.8	286.9	0.313D	1.110A	6.76	1.834	65.2	293.4	10.4	1.084
		10.05	29.96	40.01	ONE	0.648	304.4	0.0	165.0										
								ARRIVAL DATE = 2444316.0											
44160.0	44316.0	0.429	352.2	-35.1	-15.39	0.825	71.3	0.442	0.755	152.2	341.2	0.422D	1.089	21.80	1.828	84.3	279.5	52.8	0.848
		9.08	23.00	32.08	TWO	0.667	311.0	0.0	121.0										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44180.0	44316.0	0.376	341.4	19.8	12.13	0.800	74.7	0.440	0.727	158.4	326.9	0.407D	1.047	-5.31	1.814	80.1	278.8	-13.8	0.692
		7.93	18.39	26.32	ONE	0.667	311.0	0.0	145.2										
44190.0	44316.0	0.327	350.9	13.0	6.37	0.787	76.8	0.441	0.713	162.0	320.7	0.399D	1.028	0.46	1.807	78.2	281.8	1.1	0.714
		6.92	19.04	25.96	ONE	0.667	311.0	0.0	150.8										
44200.0	44316.0	0.304	355.7	10.7	4.59	0.772	79.4	0.444	0.700	166.1	314.7	0.389D	1.011	2.67	1.799	76.5	285.2	6.2	0.755
		6.48	20.25	26.73	ONE	0.667	311.0	0.0	153.5										
44210.0	44316.0	0.289	357.7	9.3	3.61	0.759	82.5	0.448	0.688	170.6	309.1	0.380D	0.997	3.88	1.793	74.8	288.2	8.5	0.794
		6.19	21.41	27.60	ONE	0.667	311.0	0.0	155.7										
44220.0	44316.0	0.279	357.2	7.7	3.05	0.746	86.5	0.455	0.678	175.8	304.1	0.370D	0.987	4.69	1.787	73.3	290.7	9.7	0.831
		6.02	22.49	28.51	ONE	0.667	311.0	0.0	157.5										
44230.0	44316.0	0.281	354.0	5.2	2.71	0.739	91.5	0.464	0.672	181.8	300.0	0.361D	0.984A	5.30	1.783	71.9	292.7	10.4	0.865
		6.06	23.49	29.55	ONE	0.667	311.0	0.0	159.0										
44240.0	44316.0	0.303	348.7	1.8	2.51	0.741	97.9	0.476	0.674	188.9	296.9	0.353D	0.994A	5.81	1.784	70.8	294.2	11.0	0.897
		6.45	24.42	30.88	ONE	0.667	311.0	0.0	160.0										
44250.0	44316.0	0.355	342.9	-1.9	2.41	0.763	105.9	0.495	0.689	197.7	295.6	0.348D	1.029A	6.26	1.793	69.8	294.9	11.4	0.927
		7.49	25.33	32.82	ONE	0.667	311.0	0.0	160.4										
44260.0	44316.0	0.452	338.4	-4.9	2.39	0.819	115.4	0.528	0.734	209.0	296.7	0.347D	1.122A	6.68	1.818	69.1	294.6	11.9	0.961
		9.61	26.33	35.95	ONE	0.667	311.0	0.0	159.8										
ARRIVAL DATE = 2444318.0																			
44160.0	44318.0	0.360	347.7	-20.4	-6.28	0.830	72.0	0.429	0.760	152.0	347.2	0.434D	1.086	12.88	1.806	86.2	271.4	38.5	0.644
		7.58	17.00	24.58	TWO	0.689	317.4	0.0	122.9										
44170.0	44318.0	0.427	360.0	-37.6	-17.69	0.819	73.8	0.425	0.746	155.1	340.5	0.429D	1.063	24.42	1.799	84.2	287.5	57.4	0.878
		9.04	23.89	32.93	TWO	0.689	317.4	0.0	117.8										
44180.0	44318.0	0.426	333.8	28.5	18.80	0.807	75.6	0.423	0.733	158.4	333.3	0.423D	1.043	-11.92	1.793	82.1	281.4	-32.1	0.691
		9.01	18.36	27.37	ONE	0.689	317.4	0.0	133.3										
44190.0	44318.0	0.311	350.3	13.4	6.37	0.795	77.8	0.422	0.720	162.2	327.2	0.416D	1.024	0.65	1.786	80.4	282.5	1.8	0.641
		6.61	16.91	23.52	ONE	0.689	317.4	0.0	145.0										
44200.0	44318.0	0.285	355.5	9.6	3.89	0.783	80.4	0.423	0.708	166.4	321.4	0.409D	1.008	3.29	1.779	78.8	286.2	8.5	0.679
		6.13	18.03	24.16	ONE	0.689	317.4	0.0	147.7										
44210.0	44318.0	0.269	357.2	7.7	2.86	0.771	83.6	0.426	0.697	171.2	316.1	0.400D	0.995	4.47	1.773	77.3	289.4	10.9	0.715
		5.84	19.08	24.92	ONE	0.689	317.4	0.0	150.0										
44220.0	44318.0	0.260	356.0	5.7	2.31	0.762	87.4	0.431	0.689	176.6	311.4	0.392D	0.986	5.18	1.768	75.9	292.0	12.0	0.747
		5.69	20.02	25.70	ONE	0.689	317.4	0.0	152.0										
44230.0	44318.0	0.263	352.1	2.8	1.99	0.757	92.3	0.438	0.685	183.0	307.6	0.385D	0.985A	5.68	1.766	74.7	294.0	12.5	0.776
		5.74	20.86	26.60	ONE	0.689	317.4	0.0	153.6										
44240.0	44318.0	0.287	346.3	-0.7	1.80	0.762	98.4	0.449	0.688	190.6	305.0	0.379D	0.997A	6.07	1.768	73.7	295.4	12.9	0.802
		6.15	21.63	27.79	ONE	0.689	317.4	0.0	154.6										
44250.0	44318.0	0.341	340.5	-4.2	1.69	0.785	105.9	0.467	0.706	200.0	304.2	0.376D	1.036A	6.39	1.778	73.0	295.9	13.2	0.827
		7.20	22.36	29.56	ONE	0.689	317.4	0.0	154.9										
44260.0	44318.0	0.438	336.3	-6.8	1.65	0.842	114.8	0.501	0.755	211.9	306.0	0.377D	1.134A	6.69	1.804	72.6	295.1	13.6	0.854
		9.29	23.17	32.46	ONE	0.689	317.4	0.0	154.0										
ARRIVAL DATE = 2444320.0																			
44160.0	44320.0	0.339	345.0	-12.7	-2.49	0.833	72.6	0.419	0.763	151.8	353.1	0.443D	1.083	9.26	1.786	88.0	267.6	31.3	0.553
		7.16	14.33	21.49	TWO	0.714	323.6	0.0	118.5										
44170.0	44320.0	0.326	352.7	-15.4	-4.59	0.823	74.4	0.413	0.751	155.0	346.3	0.441D	1.061	11.45	1.780	86.0	274.8	35.6	0.605
		6.90	15.86	22.76	TWO	0.714	323.6	0.0	122.4										
44190.0	44320.0	0.297	350.2	13.0	5.91	0.802	78.6	0.407	0.726	162.4	333.6	0.431D	1.022	1.10	1.768	82.4	282.2	3.3	0.578
		6.33	15.06	21.39	ONE	0.714	323.6	0.0	138.5										
44200.0	44320.0	0.269	355.9	7.1	2.79	0.792	81.2	0.406	0.715	166.7	327.9	0.425D	1.006	4.30	1.762	80.9	286.4	12.2	0.616
		5.83	16.17	22.00	ONE	0.714	323.6	0.0	141.1										
44210.0	44320.0	0.253	357.1	5.0	1.86	0.782	84.4	0.407	0.706	171.7	322.8	0.418D	0.993	5.32	1.756	79.5	289.9	14.3	0.647
		5.56	17.09	22.65	ONE	0.714	323.6	0.0	143.7										
44220.0	44320.0	0.245	355.3	2.9	1.43	0.774	88.2	0.411	0.698	177.4	318.3	0.412D	0.985	5.84	1.752	78.2	292.6	15.0	0.675
		5.42	17.89	23.31	ONE	0.714	323.6	0.0	145.9										
44230.0	44320.0	0.249	350.7	-0.0	1.19	0.772	93.0	0.417	0.696	184.1	314.9	0.406D	0.986A	6.17	1.750	77.1	294.7	15.2	0.698
		5.50	18.59	24.09	ONE	0.714	323.6	0.0	147.6										
44240.0	44320.0	0.274	344.4	-3.5	1.05	0.779	98.8	0.427	0.701	192.2	312.8	0.402D	1.000A	6.41	1.753	76.3	295.9	15.3	0.720
		5.93	19.21	25.14	ONE	0.714	323.6	0.0	148.6										
44250.0	44320.0	0.331	338.6	-6.6	0.96	0.804	105.9	0.445	0.721	202.1	312.5	0.400D	1.042A	6.61	1.765	75.8	296.1	15.5	0.739
		6.99	19.79	26.78	ONE	0.714	323.6	0.0	148.7										
44260.0	44320.0	0.428	334.6	-8.7	0.91	0.860	114.3	0.481	0.773	214.6	314.7	0.402D	1.145A	6.78	1.791	75.7	294.9	15.6	0.762
		9.05	20.45	29.50	ONE	0.714	323.6	0.0	147.6										
ARRIVAL DATE = 2444322.0																			
44160.0	44322.0	0.331	343.3	-8.1	-0.38	0.836	73.0	0.412	0.766	151.7	358.9	0.451D	1.081	7.34	1.770	89.7	263.7	27.0	0.497
		6.99	12.71	19.71	TWO	0.740	329.6	0.0	111.4										
44170.0	44322.0	0.311	349.1	-6.3	-0.58	0.827	74.9	0.404	0.754	154.9	352.1	0.449D	1.059	7.56	1.764	87.7	270.9	26.6	0.518
		6.60	13.32	19.92	TWO	0.740	329.6	0.0	117.6										
44180.0	44322.0	0.291	354.7	-6.4	-1.36	0.818	76.9	0.398	0.742	158.5	345.7	0.447D	1.038	8.35	1.758	86.0	277.1	27.8	0.547
		6.24	14.16	20.40	TWO	0.740	329.6	0.0	122.6										
44190.0	44322.0	0.277	352.5	7.9	3.55	0.808	79.2	0.394	0.731	162.5	339.7	0.443D	1.020	3.46	1.752	84.3	281.1	11.4	0.531
		5.98	13.68	19.66	ONE	0.740	329.6	0.0	130.5										
44200.0	44322.0	0.254	357.7	1.6	0.77	0.799	81.9	0.392	0.721	167.1	334.2	0.438D	1.004	6.25	1.747	82.8	286.0	19.3	0.570
		5.59	14.84	20.43	ONE	0.740	329.6	0.0	133.1										
44210.0	44322.0	0.240	357.9	0.7	0.44	0.790	85.0	0.392	0.712	172.2	329.2	0.433D	0.992	6.60	1.742	81.5	289.6	19.4	0.594
		5.35	15.54	20.88	ONE	0.740	329.6	0.0	136.3										
44220.0	44322.0	0.232	355.2	-0.9	0.32	0.785	88.8	0.394	0.706	178.2	325.1	0.428D	0.985	6.74	1.738	80.3	292.5	19.1	0.615
		5.23	16.14	21.37	ONE	0.740	329.6	0.0	138.9										
44230.0	44322.0	0.238	349.8	-3.5	0.25	0.784	93.4	0.399	0.705	185.2	321.9	0.423D	0.986A	6.82	1.738	79.4	294.6	18.7	0.633
		5.32	16.68	22.00	ONE	0.740	329.6	0.0	140.8										
44240.0	44322.0	0.265	343.1	-6.5	0.21	0.793	99.1	0.409	0.711	193.6	320.1	0.420D	1.003A	6.87	1.741	78.7	295.7	18.3	0.650
		5.78	17.16	22.93	ONE	0.740	329.6	0.0	142.0										
44250.0	44322.0	0.323	337.2	-9.0	0.19	0.818	105.9	0.428	0.733	204.0	320.3	0.419D	1.047A	6.92	1.753	78.4	295.6	18.1	0.665
		6.84	17.62	24.45	ONE	0.740	329.6	0.0	142.0										
44260.0	44322.0	0.420	333.5	-10.6	0.18	0.873	113.9	0.465	0.788	216.7	322.8	0.422D	1.154A	6.95	1.780	78.4	293.9	18.0	0.684
		8.87	18.16	27.02	ONE	0.740	329.6	0.0	140.5										
ARRIVAL DATE = 2444324.0																			
44160.0	44324.0	0.327	342.1	-5.0	0.99	0.838	73.2	0.407	0.768	151.5	364.5	0.456	1.080	6.15	1.756	91.3	259.2	24.0	0.462
		6.92	11.71	18.63	TWO	0.767	335.4	0.0	102.5										
44170.0	44324.0	0.306	347.1	-1.6	1.38	0.830	75.2	0.397	0.757	154.8	357.8	0.456D	1.057	5.72	1.750	89.4	266.8	21.8	0.470
		6.51	11.93	18.44	TWO	0.767	335.4	0.0	109.8										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44180.0	44324.0	0.286	350.5	3.2	2.39	0.821	77.3	0.390	0.746	158.5	351.5	0.455D	1.036	4.66	1.745	87.6	273.3	17.3	0.477
		6.15	12.12	18.27	TWO	0.767	335.4	0.0	116.5										
44190.0	44324.0	0.308	343.8	22.7	10.14	0.813	79.7	0.385	0.735	162.6	345.7	0.452D	1.018	-3.14	1.739	86.0	278.7	-11.3	0.485
		6.55	12.35	18.90	TWO	0.767	335.4	0.0	122.5										
44200.0	44324.0	0.255	3.6	-13.5	-4.37	0.804	82.4	0.382	0.726	167.3	340.2	0.449D	1.003	11.32	1.734	84.6	285.9	35.8	0.579
		5.60	15.10	20.70	ONE	0.767	335.4	0.0	121.7										
44210.0	44324.0	0.233	0.1	-6.7	-1.82	0.797	85.5	0.381	0.718	172.6	335.4	0.445D	0.991	8.73	1.730	83.3	288.8	27.6	0.563
		5.23	14.62	19.85	ONE	0.767	335.4	0.0	127.4										
44220.0	44324.0	0.224	356.0	-6.3	-1.17	0.793	89.3	0.382	0.713	178.8	331.5	0.441D	0.985	8.03	1.727	82.2	291.6	24.7	0.571
		5.10	14.85	19.96	ONE	0.767	335.4	0.0	130.9										
44230.0	44324.0	0.231	349.7	-7.7	-0.89	0.793	93.8	0.386	0.712	186.1	328.6	0.437D	0.987A	7.69	1.727	81.4	293.6	23.1	0.582
		5.20	15.17	20.37	ONE	0.767	335.4	0.0	133.3										
44240.0	44324.0	0.259	342.4	-9.9	-0.73	0.803	99.3	0.395	0.720	194.8	327.1	0.435D	1.005A	7.47	1.731	80.8	294.6	22.0	0.593
		5.67	15.49	21.16	ONE	0.767	335.4	0.0	134.5										
44250.0	44324.0	0.317	336.4	-11.6	-0.64	0.829	105.9	0.414	0.743	205.4	327.5	0.435D	1.051A	7.32	1.744	80.6	294.2	21.3	0.604
		6.73	15.83	22.56	ONE	0.767	335.4	0.0	134.5										
44260.0	44324.0	0.413	332.8	-12.4	-0.58	0.883	113.5	0.452	0.799	218.4	330.3	0.437D	1.160A	7.20	1.770	80.9	292.0	20.7	0.620
		8.72	16.29	25.01	ONE	0.767	335.4	0.0	132.8										

ARRIVAL DATE = 2444326.0

44160.0	44326.0	0.327	341.3	-2.7	1.97	0.840	73.3	0.404	0.769	151.4	370.0	0.458	1.080	5.36	1.745	92.9	254.1	21.5	0.444
		6.91	11.18	18.09	TWO	0.795	341.2	0.0	92.8										
44170.0	44326.0	0.305	346.0	1.3	2.56	0.832	75.4	0.393	0.759	154.7	363.4	0.460	1.057	4.65	1.740	91.0	262.2	18.6	0.442
		6.49	11.11	17.60	TWO	0.795	341.2	0.0	100.4										
44180.0	44326.0	0.286	348.7	6.9	3.83	0.824	77.6	0.385	0.748	158.4	357.2	0.460D	1.036	3.27	1.734	89.2	269.2	13.0	0.441
		6.14	11.09	17.23	TWO	0.795	341.2	0.0	107.5										
44190.0	44326.0	0.288	346.1	19.2	8.09	0.816	80.0	0.378	0.738	162.6	351.4	0.459D	1.017	-1.10	1.729	87.6	275.2	-4.3	0.444
		6.18	11.18	17.36	TWO	0.795	341.2	0.0	113.9										
44210.0	44326.0	0.244	5.4	-20.1	-6.14	0.802	85.8	0.372	0.722	172.9	341.3	0.454D	0.990	12.91	1.720	85.0	287.9	41.4	0.579
		5.42	15.09	20.51	ONE	0.795	341.2	0.0	116.7										
44220.0	44326.0	0.223	358.3	-13.8	-3.33	0.799	89.6	0.372	0.718	179.3	337.6	0.451D	0.985	9.99	1.718	84.0	290.0	32.7	0.549
		5.09	14.21	19.30	ONE	0.795	341.2	0.0	121.8										
44230.0	44326.0	0.227	350.6	-13.0	-2.33	0.800	94.0	0.376	0.718	186.8	334.9	0.448D	0.988A	8.88	1.718	83.2	291.8	28.8	0.546
		5.15	14.14	19.29	ONE	0.795	341.2	0.0	124.8										
44240.0	44326.0	0.255	342.6	-13.6	-1.84	0.811	99.4	0.385	0.727	195.7	333.7	0.447D	1.006A	8.26	1.723	82.8	292.6	26.5	0.550
		5.60	14.25	19.85	ONE	0.795	341.2	0.0	126.3										
44250.0	44326.0	0.313	336.2	-14.2	-1.56	0.837	105.8	0.404	0.750	206.5	334.3	0.447D	1.054A	7.85	1.736	82.7	292.0	24.9	0.557
		6.65	14.46	21.11	ONE	0.795	341.2	0.0	126.3										
44260.0	44326.0	0.407	332.6	-14.3	-1.39	0.890	113.2	0.443	0.806	219.5	337.1	0.449D	1.163A	7.54	1.762	83.0	289.3	23.7	0.571
		8.59	14.85	23.45	ONE	0.795	341.2	0.0	124.5										

ARRIVAL DATE = 2444328.0

44160.0	44328.0	0.329	340.8	-0.9	2.72	0.840	73.2	0.404	0.770	151.2	375.4	0.459	1.082	4.79	1.737	94.4	248.9	19.2	0.440
		6.96	11.07	18.03	TWO	0.824	346.8	0.0	82.6										
44170.0	44328.0	0.306	345.3	3.3	3.37	0.833	75.4	0.392	0.760	154.5	368.8	0.462	1.057	3.96	1.732	92.5	257.1	16.2	0.429
		6.52	10.75	17.27	TWO	0.824	346.8	0.0	90.3										
44180.0	44328.0	0.287	347.9	9.0	4.60	0.826	77.6	0.382	0.750	158.2	362.6	0.463	1.036	2.55	1.726	90.7	264.5	10.5	0.422
		6.16	10.54	16.70	TWO	0.824	346.8	0.0	97.5										
44190.0	44328.0	0.283	346.6	18.6	7.66	0.818	80.1	0.374	0.740	162.5	356.9	0.463D	1.017	-0.67	1.722	89.2	270.9	-2.8	0.421
		6.08	10.51	16.59	TWO	0.824	346.8	0.0	104.1										
44200.0	44328.0	0.448	329.5	39.8	24.38	0.812	82.9	0.368	0.732	167.5	352.1	0.462D	1.001	-17.57	1.717	87.9	280.4	-55.8	0.626
		9.51	16.46	25.97	TWO	0.824	346.8	0.0	103.0										
44210.0	44328.0	0.356	16.2	-41.5	-17.79	0.806	86.0	0.365	0.725	172.9	346.7	0.460D	0.990	24.44	1.713	86.5	293.7	66.7	0.770
		7.49	20.70	28.19	ONE	0.824	346.8	0.0	103.8										
44220.0	44328.0	0.238	3.0	-24.6	-6.82	0.803	89.7	0.365	0.721	179.5	343.3	0.458D	0.985	13.30	1.711	85.6	287.9	44.1	0.564
		5.32	14.66	19.98	ONE	0.824	346.8	0.0	111.8										
44230.0	44328.0	0.230	352.9	-19.6	-4.28	0.806	94.1	0.368	0.722	187.2	340.8	0.457D	0.988A	10.58	1.712	84.9	289.2	36.1	0.531
		5.19	13.70	18.90	ONE	0.824	346.8	0.0	115.7										
44240.0	44328.0	0.254	343.6	-18.0	-3.19	0.817	99.4	0.377	0.731	196.3	339.8	0.456D	1.007A	9.31	1.717	84.5	289.7	31.9	0.523
		5.59	13.47	19.06	ONE	0.824	346.8	0.0	117.5										
44250.0	44328.0	0.310	336.7	-17.1	-2.61	0.842	105.6	0.396	0.755	207.2	340.5	0.456D	1.055A	8.53	1.729	84.5	288.8	29.1	0.525
		6.60	13.52	20.11	ONE	0.824	346.8	0.0	117.6										
44260.0	44328.0	0.402	333.0	-16.1	-2.27	0.893	112.8	0.435	0.810	220.1	343.3	0.458D	1.163A	7.98	1.755	85.0	285.8	26.9	0.536
		8.48	13.83	22.32	ONE	0.824	346.8	0.0	115.6										

ARRIVAL DATE = 2444330.0

44160.0	44330.0	0.334	340.5	0.4	3.33	0.841	72.9	0.407	0.771	150.9	380.7	0.457	1.084	4.38	1.731	95.9	244.2	17.0	0.450
		7.06	11.36	18.42	TWO	0.853	352.3	0.0	72.6										
44170.0	44330.0	0.310	344.9	4.8	3.96	0.834	75.2	0.393	0.760	154.2	374.1	0.462	1.059	3.48	1.726	94.0	252.1	14.1	0.431
		6.58	10.80	17.39	TWO	0.853	352.3	0.0	80.1										
44180.0	44330.0	0.290	347.6	10.3	5.10	0.827	77.5	0.381	0.751	158.0	367.9	0.464	1.037	2.11	1.721	92.2	259.5	8.7	0.417
		6.21	10.39	16.60	TWO	0.853	352.3	0.0	87.1										
44190.0	44330.0	0.281	347.0	18.4	7.46	0.820	80.1	0.372	0.741	162.4	362.3	0.466	1.017	-0.49	1.717	90.6	266.0	-2.1	0.410
		6.05	10.20	16.24	TWO	0.853	352.3	0.0	93.7										
44200.0	44330.0	0.329	338.3	33.1	14.73	0.813	82.9	0.365	0.733	167.3	357.4	0.465D	1.001	-7.98	1.712	89.3	272.0	-31.1	0.460
		6.96	11.63	18.59	TWO	0.853	352.3	0.0	98.2										
44220.0	44330.0	0.300	11.5	-38.5	-13.62	0.806	89.7	0.360	0.724	179.5	348.6	0.463D	0.985	19.91	1.707	87.0	286.9	60.8	0.665
		6.40	17.61	24.01	ONE	0.853	352.3	0.0	101.7										
44230.0	44330.0	0.244	357.2	-27.8	-7.15	0.809	94.1	0.363	0.725	187.3	346.4	0.462D	0.988A	13.21	1.708	86.4	285.8	45.5	0.546
		5.42	14.14	19.56	ONE	0.853	352.3	0.0	106.2										
44240.0	44330.0	0.258	345.9	-23.0	-4.94	0.820	99.3	0.371	0.734	196.5	345.4	0.462D	1.007A	10.76	1.713	86.1	286.0	38.2	0.516
		5.65	13.25	18.89	ONE	0.853	352.3	0.0	108.4										
44250.0	44330.0	0.309	338.0	-20.2	-3.86	0.845	105.4	0.391	0.758	207.4	346.2	0.462D	1.054A	9.44	1.725	86.1	284.8	33.8	0.508
		6.58	13.02	19.60	ONE	0.853	352.3	0.0	108.5										
44260.0	44330.0	0.398	333.8	-18.1	-3.26	0.894	112.4	0.429	0.811	220.2	348.9	0.463D	1.159A	8.56	1.750	86.7	281.6	30.3	0.515
		8.39	13.24	21.62	ONE	0.853	352.3	0.0	106.5										

ARRIVAL DATE = 2444332.0

44160.0	44332.0	0.341	340.3	1.5	3.84	0.841	72.5	0.412	0.770	150.6	385.9	0.453	1.088	4.07	1.729	97.5	240.2	14.9	0.473
		7.20	12.01	19.22	TWO	0.882	357.9	0.0	63.3										
44170.0	44332.0	0.316	344.8	5.9	4.44	0.834	74.9	0.396	0.760	153.9	379.3	0.459	1.061	3.14	1.724	95.4	247.6	12.2	0.445
		6.69	11.22	17.91	TWO	0.882	357.9	0.0	70.2										
44180.0	44332.0	0.294	347.6	11.1	5.45	0.827	77.3	0.383	0.751	157.7	373.1	0.463	1.038	1.81	1.719	93.6	254.7	7.4	0.424
		6.29	10.61	16.90	TWO	0.882	357.9	0.0	76.9										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44190.0	44332.0	0.281	347.6	18.2	7.35	0.820	79.9	0.373	0.742	162.0	367.5	0.466	1.018	-0.39	1.714	92.0	261.1	-1.6	0.411
		6.06	10.24	16.29	TWO	0.882	357.9	0.0	83.2										
44200.0	44332.0	0.300	342.2	29.2	11.87	0.814	82.8	0.365	0.734	167.0	362.6	0.466	1.002	-5.19	1.710	90.7	266.7	-21.2	0.427
		6.39	10.69	17.08	TWO	0.882	357.9	0.0	88.9										
44210.0	44332.0	0.542	326.3	43.0	31.85	0.810	86.1	0.359	0.728	172.9	358.9	0.467D	0.990	-25.46	1.707	89.7	272.9	-72.1	0.771
		11.74	20.72	32.46	TWO	0.882	357.9	0.0	91.6										
44220.0	44332.0	0.541	21.3	-49.5	-32.01	0.808	89.5	0.358	0.725	179.1	353.1	0.466D	0.985	38.12	1.705	88.2	329.6	85.9	1.055
		11.72	29.10	40.83	ONE	0.882	357.9	0.0	93.6										
44230.0	44332.0	0.285	4.5	-37.5	-11.85	0.810	93.9	0.360	0.727	187.0	351.5	0.465D	0.988A	17.68	1.706	87.8	281.9	57.6	0.513
		6.11	16.09	22.21	ONE	0.882	357.9	0.0	97.4										
44240.0	44332.0	0.269	349.9	-29.0	-7.32	0.821	99.1	0.368	0.736	196.3	350.7	0.465D	1.006A	12.86	1.711	87.5	281.5	45.7	0.532
		5.84	13.72	19.56	ONE	0.882	357.9	0.0	99.5										
44250.0	44332.0	0.311	340.2	-23.8	-5.41	0.846	105.1	0.387	0.758	207.2	351.4	0.465D	1.052A	10.65	1.723	87.6	280.2	38.8	0.508
		6.61	13.02	19.63	ONE	0.882	357.9	0.0	99.6										
44260.0	44332.0	0.394	335.3	-20.2	-4.40	0.892	112.0	0.424	0.809	219.8	354.0	0.466D	1.152A	9.32	1.747	88.2	277.0	33.7	0.509
		8.31	13.05	21.36	ONE	0.882	357.9	0.0	97.6										

ARRIVAL DATE = 2444334.0

44160.0	44334.0	0.351	340.3	2.3	4.29	0.840	71.9	0.420	0.770	150.3	391.1	0.447	1.093	3.83	1.729	99.1	237.1	13.0	0.507
		7.40	12.99	20.39	TWO	0.912	3.4	0.0	54.8										
44170.0	44334.0	0.324	344.9	6.6	4.82	0.833	74.4	0.402	0.760	153.5	384.4	0.455	1.065	2.88	1.724	96.9	243.9	10.5	0.471
		6.85	11.97	18.82	TWO	0.912	3.4	0.0	61.1										
44180.0	44334.0	0.300	347.9	11.7	5.71	0.827	76.9	0.387	0.750	157.2	378.2	0.460	1.041	1.60	1.719	95.1	250.5	6.2	0.444
		6.40	11.17	17.57	TWO	0.912	3.4	0.0	67.3										
44190.0	44334.0	0.284	348.5	18.0	7.28	0.820	79.6	0.375	0.742	161.6	372.6	0.463	1.020	-0.33	1.714	93.4	256.6	-1.3	0.424
		6.11	10.61	16.72	TWO	0.912	3.4	0.0	73.2										
44200.0	44334.0	0.288	344.7	27.0	10.48	0.814	82.5	0.366	0.734	166.6	367.6	0.465	1.003	-3.87	1.710	92.0	262.0	-15.8	0.424
		6.19	10.61	16.80	TWO	0.912	3.4	0.0	79.0										
44210.0	44334.0	0.377	333.5	39.3	19.60	0.810	85.8	0.360	0.728	172.4	363.6	0.466	0.991	-13.33	1.707	91.0	265.6	-47.6	0.533
		7.94	13.74	21.69	TWO	0.912	3.4	0.0	84.8										
44230.0	44334.0	0.395	15.3	-46.6	-21.12	0.811	93.6	0.358	0.727	186.5	356.0	0.466D	0.987A	26.73	1.706	89.0	276.3	74.1	0.798
		8.32	21.51	29.83	ONE	0.912	3.4	0.0	90.8										
44240.0	44334.0	0.295	356.1	-36.0	-10.86	0.821	98.7	0.366	0.735	195.7	355.5	0.466D	1.005A	16.12	1.711	88.8	276.2	54.5	0.583
		6.31	15.22	21.52	ONE	0.912	3.4	0.0	91.6										
44250.0	44334.0	0.317	343.7	-28.1	-7.42	0.844	104.7	0.384	0.757	206.5	356.2	0.466D	1.048A	12.34	1.722	88.9	275.2	44.3	0.527
		6.72	13.58	20.30	ONE	0.912	3.4	0.0	91.3										
44260.0	44334.0	0.392	337.4	-22.7	-5.77	0.889	111.5	0.420	0.805	219.0	358.6	0.466D	1.143A	10.32	1.745	89.6	272.4	37.2	0.517
		8.25	13.28	21.53	ONE	0.912	3.4	0.0	89.2										

ARRIVAL DATE = 2444336.0

44160.0	44336.0	0.364	340.5	2.9	4.69	0.839	71.1	0.430	0.769	149.9	396.2	0.438	1.099	3.65	1.731	100.7	235.1	11.4	0.550
		7.66	14.25	21.91	TWO	0.941	8.9	0.0	47.3										
44170.0	44336.0	0.334	345.2	7.2	5.16	0.832	73.7	0.410	0.759	153.0	389.5	0.448	1.070	2.68	1.727	98.5	241.3	9.1	0.508
		7.06	13.02	20.08	TWO	0.941	8.9	0.0	52.9										
44180.0	44336.0	0.308	348.5	12.0	5.93	0.826	76.3	0.394	0.750	156.7	383.2	0.455	1.045	1.45	1.722	96.5	247.3	5.2	0.474
		6.56	12.03	18.58	TWO	0.941	8.9	0.0	58.5										
44190.0	44336.0	0.289	349.5	17.8	7.23	0.819	79.1	0.380	0.741	161.0	377.5	0.459	1.023	-0.28	1.717	94.8	252.9	-1.1	0.448
		6.20	11.29	17.49	TWO	0.941	8.9	0.0	64.0										
44200.0	44336.0	0.285	347.0	25.4	9.65	0.814	82.1	0.370	0.734	166.0	372.5	0.462	1.005	-3.11	1.713	93.4	257.9	-12.2	0.437
		6.12	10.99	17.11	TWO	0.941	8.9	0.0	69.5										
44210.0	44336.0	0.325	338.8	35.4	15.15	0.809	85.4	0.363	0.728	171.8	368.4	0.464	0.992	-9.01	1.710	92.2	261.5	-34.0	0.479
		6.88	12.19	19.06	TWO	0.941	8.9	0.0	75.6										
44220.0	44336.0	0.597	327.1	44.1	35.95	0.807	89.2	0.359	0.725	178.6	366.0	0.465	0.985	-30.19	1.708	91.6	248.3	-77.2	0.881
		13.11	23.95	37.06	TWO	0.941	8.9	0.0	83.5										
44240.0	44336.0	0.355	5.7	-43.3	-16.78	0.819	98.2	0.366	0.734	194.8	359.8	0.465D	1.002A	21.77	1.713	89.9	268.7	65.7	0.697
		7.49	18.56	26.04	ONE	0.941	8.9	0.0	85.8										
44250.0	44336.0	0.332	348.8	-33.1	-10.22	0.841	104.1	0.383	0.754	205.5	360.5	0.465	1.043A	14.82	1.724	90.2	269.9	50.6	0.571
		7.01	14.86	21.86	ONE	0.941	8.9	0.0	84.3										
44260.0	44336.0	0.391	340.3	-25.6	-7.50	0.883	110.9	0.418	0.798	217.8	362.7	0.465	1.132A	11.69	1.745	90.8	268.0	40.9	0.540
		8.25	13.94	22.19	ONE	0.941	8.9	0.0	81.8										

ARRIVAL DATE = 2444338.0

44160.0	44338.0	0.379	340.7	3.3	5.06	0.837	70.0	0.443	0.767	149.6	401.4	0.427	1.107	3.52	1.737	102.4	234.0	9.9	0.603
		7.99	15.78	23.77	TWO	0.970	14.5	0.0	40.6										
44170.0	44338.0	0.347	345.7	7.5	5.45	0.831	72.8	0.421	0.757	152.6	394.6	0.439	1.076	2.53	1.732	100.1	239.6	7.8	0.553
		7.32	14.34	21.66	TWO	0.970	14.5	0.0	45.7										
44180.0	44338.0	0.319	349.2	12.2	6.10	0.824	75.6	0.402	0.748	156.1	388.2	0.447	1.049	1.33	1.727	98.0	245.1	4.5	0.513
		6.76	13.16	19.92	TWO	0.970	14.5	0.0	50.7										
44190.0	44338.0	0.297	350.8	17.6	7.19	0.818	78.4	0.387	0.740	160.4	382.4	0.453	1.026	-0.25	1.723	96.2	250.2	-0.9	0.481
		6.34	12.25	18.59	TWO	0.970	14.5	0.0	55.7										
44200.0	44338.0	0.286	349.2	24.1	9.08	0.812	81.5	0.376	0.732	165.2	377.4	0.457	1.007	-2.61	1.719	94.7	254.8	-9.7	0.462
		6.14	11.71	17.85	TWO	0.970	14.5	0.0	60.8										
44210.0	44338.0	0.303	343.0	32.4	12.84	0.807	84.8	0.367	0.726	170.9	373.1	0.460	0.993	-6.83	1.716	93.5	258.3	-25.4	0.475
		6.45	12.07	18.52	TWO	0.970	14.5	0.0	66.5										
44220.0	44338.0	0.417	331.8	41.7	22.87	0.805	88.6	0.362	0.723	177.6	370.1	0.461	0.985	-17.29	1.714	92.7	257.2	-54.8	0.623
		8.80	16.37	25.17	TWO	0.970	14.5	0.0	74.7										
44240.0	44338.0	0.506	18.3	-48.1	-28.66	0.816	97.6	0.367	0.731	193.5	363.5	0.463	0.999A	33.38	1.718	90.9	241.2	80.2	0.959
		10.88	26.28	37.16	ONE	0.970	14.5	0.0	83.3										
44250.0	44338.0	0.365	356.5	-38.9	-14.46	0.836	103.5	0.383	0.750	204.1	364.5	0.462	1.037A	18.75	1.728	91.2	263.7	58.3	0.653
		7.68	17.25	24.93	ONE	0.970	14.5	0.0	79.2										
44260.0	44338.0	0.396	344.5	-29.0	-9.78	0.876	110.2	0.415	0.790	216.1	366.5	0.462	1.119A	13.62	1.748	91.9	264.0	45.2	0.580
		8.35	15.11	23.46	ONE	0.970	14.5	0.0	75.7										

ARRIVAL DATE = 2444340.0

44160.0	44340.0	0.398	341.1	3.5	5.42	0.836	68.8	0.459	0.765	149.2	406.7	0.414	1.117	3.42	1.745	104.3	233.7	8.8	0.664
		8.39	17.58	25.97	TWO	0.999	20.1	0.0	34.6										
44170.0	44340.0	0.363	346.3	7.7	5.72	0.829	71.7	0.434	0.756	152.1	399.7	0.427	1.084	2.42	1.741	101.7	238.9	6.8	0.607
		7.64	15.92	23.56	TWO	0.999	20.1	0.0	39.2										
44180.0	44340.0	0.332	350.2	12.2	6.26	0.822	74.6	0.414	0.746	155.5	393.2	0.437	1.055	1.24	1.736	99.6	243.8	3.8	0.560
		7.01	14.55	21.56	TWO	0.999	20.1	0.0	43.8										
44190.0	44340.0	0.306	352.2	17.2	7.15	0.816	77.6	0.397	0.738	159.6	387.3	0.445	1.031	-0.23	1.731	97.7	248.5	-0.7	0.523
		6.52	13.45	19.97	TWO	0.999	20.1	0.0	48.4										
44200.0	44340.0	0.290	351.5	23.1	8.66	0.810	80.7	0.384	0.730	164.4	382.1	0.450	1.010	-2.27	1.727	96.1	252.7	-7.9	0.497
		6.22	12.71	18.93	TWO	0.999	20.1	0.0	53.0										

DEPART	ARRIVE	SPEED / DVI	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44210.0	44340.0	0.293	346.8	30.2	11.41	0.805	84.1	0.374	0.724	169.9	377.7	0.454	0.995	-5.52	1.724	94.8	256.0	-19.6	0.493
		6.28	12.59	18.87	TWO	0.999	20.1	0.0	58.1										
44220.0	44340.0	0.349	337.4	38.3	17.43	0.802	87.9	0.368	0.721	176.4	374.4	0.456	0.986	-12.03	1.722	93.9	257.0	-40.2	0.555
		7.35	14.39	21.75	TWO	0.999	20.1	0.0	65.3										
44250.0	44340.0	0.441	7.8	-44.4	-21.76	0.830	102.8	0.384	0.744	202.4	368.0	0.458	1.030A	25.74	1.735	92.2	252.3	68.3	0.810
		9.36	21.87	31.22	ONE	0.999	20.1	0.0	76.9										
44260.0	44340.0	0.411	350.3	-33.3	-13.02	0.867	109.5	0.414	0.781	214.2	370.0	0.457	1.104A	16.52	1.753	92.9	259.9	50.6	0.644
		8.68	16.99	25.66	ONE	0.999	20.1	0.0	71.4										
								ARRIVAL DATE = 2444342.0											
44160.0	44342.0	0.420	341.5	3.6	5.76	0.834	67.3	0.479	0.763	149.0	412.2	0.398	1.129	3.37	1.757	106.3	234.2	7.8	0.734
		8.89	19.64	28.52	TWO	1.027	25.9	0.0	29.3										
44170.0	44342.0	0.382	346.9	7.7	5.97	0.827	70.4	0.451	0.754	151.6	404.9	0.414	1.093	2.33	1.752	103.6	238.9	5.9	0.670
		8.04	17.75	25.79	TWO	1.027	25.9	0.0	33.5										
44180.0	44342.0	0.348	351.2	12.1	6.40	0.820	73.5	0.428	0.744	154.8	398.3	0.426	1.063	1.18	1.747	101.2	243.4	3.3	0.616
		7.33	16.17	23.50	TWO	1.027	25.9	0.0	37.7										
44190.0	44342.0	0.319	353.7	16.9	7.13	0.813	76.5	0.409	0.735	158.8	392.2	0.435	1.036	-0.21	1.743	99.2	247.7	-0.6	0.572
		6.76	14.85	21.65	TWO	1.027	25.9	0.0	41.9										
44200.0	44342.0	0.298	353.8	22.2	8.33	0.807	79.7	0.394	0.728	163.4	386.9	0.441	1.014	-2.02	1.738	97.5	251.6	-6.5	0.540
		6.36	13.95	20.31	TWO	1.027	25.9	0.0	46.1										
44210.0	44342.0	0.291	350.4	28.3	10.41	0.802	83.2	0.383	0.721	168.8	382.3	0.445	0.997	-4.66	1.735	96.1	254.8	-15.5	0.525
		6.24	13.51	19.75	TWO	1.027	25.9	0.0	50.7										
44220.0	44342.0	0.318	342.7	35.2	14.44	0.799	87.1	0.375	0.717	175.1	378.7	0.448	0.987	-9.23	1.733	95.1	256.4	-30.3	0.548
		6.73	14.19	20.93	TWO	1.027	25.9	0.0	56.7										
44230.0	44342.0	0.440	332.8	42.3	24.46	0.799	91.5	0.373	0.717	182.6	376.5	0.450	0.984A	-19.77	1.733	94.5	251.4	-55.4	0.710
		9.32	18.91	28.24	TWO	1.027	25.9	0.0	66.6										
44260.0	44342.0	0.448	358.9	-38.3	-18.11	0.857	108.6	0.414	0.770	211.9	373.2	0.451	1.089A	21.26	1.760	93.8	254.2	57.9	0.751
		9.52	20.15	29.67	ONE	1.027	25.9	0.0	69.3										
								ARRIVAL DATE = 2444344.0											
44160.0	44344.0	0.447	341.8	3.5	6.11	0.831	65.5	0.502	0.761	148.8	417.9	0.379	1.143	3.34	1.771	108.6	235.2	6.9	0.814
		9.49	21.98	31.47	TWO	1.056	31.7	0.0	24.4										
44170.0	44344.0	0.404	347.7	7.6	6.21	0.824	68.8	0.471	0.751	151.1	410.4	0.397	1.105	2.27	1.766	105.6	239.6	5.2	0.741
		8.53	19.84	28.36	TWO	1.056	31.7	0.0	28.3										
44180.0	44344.0	0.367	352.3	11.9	6.53	0.817	72.1	0.445	0.742	154.2	403.5	0.411	1.072	1.12	1.761	103.0	243.8	2.8	0.680
		7.72	18.03	25.75	TWO	1.056	31.7	0.0	32.2										
44190.0	44344.0	0.334	355.4	16.4	7.10	0.810	75.3	0.424	0.733	157.9	397.2	0.422	1.043	-0.19	1.757	100.9	247.8	-0.5	0.629
		7.06	16.55	23.61	TWO	1.056	31.7	0.0	36.1										
44200.0	44344.0	0.309	356.3	21.3	8.06	0.803	78.6	0.407	0.725	162.3	391.7	0.430	1.020	-1.83	1.753	99.0	251.4	-5.4	0.590
		6.56	15.42	21.98	TWO	1.056	31.7	0.0	40.0										
44210.0	44344.0	0.295	354.0	26.8	9.66	0.798	82.2	0.394	0.718	167.6	386.9	0.436	1.001	-4.06	1.749	97.5	254.4	-12.5	0.566
		6.30	14.71	21.01	TWO	1.056	31.7	0.0	44.1										
44220.0	44344.0	0.303	347.8	32.7	12.52	0.794	86.1	0.385	0.714	173.7	383.1	0.439	0.988	-7.51	1.747	96.4	256.3	-23.5	0.568
		6.46	14.78	21.23	TWO	1.056	31.7	0.0	49.3										
44230.0	44344.0	0.365	338.4	38.9	18.53	0.794	90.5	0.380	0.713	180.9	380.4	0.442	0.984A	-14.08	1.746	95.6	255.2	-41.4	0.639
		7.69	16.85	24.54	TWO	1.056	31.7	0.0	57.0										
44260.0	44344.0	0.543	11.5	-42.7	-27.31	0.845	107.6	0.414	0.759	209.3	375.9	0.444	1.073A	30.11	1.770	94.6	239.8	67.7	0.957
		11.77	26.20	37.98	ONE	1.056	31.7	0.0	70.4										
								ARRIVAL DATE = 2444346.0											
44160.0	44346.0	0.478	342.2	3.3	6.46	0.829	63.3	0.530	0.759	148.7	423.9	0.357	1.161	3.36	1.789	111.1	236.6	6.2	0.904
		10.21	24.64	34.86	TWO	1.083	37.8	0.0	19.8										
44170.0	44346.0	0.431	348.4	7.4	6.45	0.821	67.0	0.495	0.749	150.8	416.0	0.378	1.119	2.24	1.784	107.8	240.9	4.6	0.821
		9.12	22.20	31.32	TWO	1.083	37.8	0.0	23.6										
44180.0	44346.0	0.389	352.5	11.5	6.65	0.814	70.4	0.466	0.739	153.5	408.9	0.395	1.083	1.09	1.779	105.0	244.9	2.5	0.752
		8.20	20.15	28.35	TWO	1.083	37.8	0.0	27.2										
44190.0	44346.0	0.353	357.1	15.9	7.08	0.806	73.8	0.442	0.730	157.0	402.4	0.407	1.052	-0.18	1.774	102.7	248.6	-0.5	0.694
		7.44	18.45	25.88	TWO	1.083	37.8	0.0	30.8										
44200.0	44346.0	0.323	358.8	20.5	7.82	0.799	77.2	0.422	0.721	161.2	396.6	0.417	1.026	-1.69	1.770	100.7	252.0	-4.5	0.648
		6.83	17.10	23.93	TWO	1.083	37.8	0.0	34.5										
44210.0	44346.0	0.302	357.7	25.4	9.06	0.793	80.9	0.407	0.714	166.2	391.6	0.424	1.005	-3.61	1.766	99.0	254.9	-10.3	0.616
		6.44	16.16	22.60	TWO	1.083	37.8	0.0	38.3										
44220.0	44346.0	0.298	352.8	30.6	11.16	0.789	84.9	0.396	0.710	172.1	387.5	0.428	0.991	-6.36	1.763	97.7	256.9	-18.7	0.604
		6.37	15.81	22.18	TWO	1.083	37.8	0.0	42.7										
44230.0	44346.0	0.329	344.4	35.9	15.11	0.787	89.4	0.390	0.708	179.0	384.5	0.432	0.984	-10.93	1.762	96.8	257.2	-31.6	0.632
		6.95	16.65	23.60	TWO	1.083	37.8	0.0	48.9										
44240.0	44346.0	0.444	335.6	41.4	24.26	0.792	94.5	0.391	0.711	187.1	383.0	0.433	0.988A	-20.67	1.764	96.4	251.0	-52.1	0.784
		9.43	21.12	30.54	TWO	1.083	37.8	0.0	59.1										
								ARRIVAL DATE = 2444348.0											
44160.0	44348.0	0.515	342.5	2.9	6.83	0.826	60.8	0.562	0.756	148.9	430.3	0.331	1.181	3.41	1.810	114.0	238.5	5.6	1.006
		11.09	27.67	38.76	TWO	1.111	44.0	0.0	15.6										
44170.0	44348.0	0.462	349.1	7.0	6.70	0.818	64.7	0.523	0.746	150.6	422.0	0.356	1.136	2.23	1.804	110.4	242.6	4.1	0.912
		9.84	24.89	34.73	TWO	1.111	44.0	0.0	19.1										
44180.0	44348.0	0.416	354.6	11.1	6.77	0.810	68.4	0.490	0.736	153.0	414.6	0.375	1.096	1.06	1.799	107.3	246.5	2.2	0.833
		8.79	22.54	31.33	TWO	1.111	44.0	0.0	22.6										
44190.0	44348.0	0.375	358.8	15.3	7.06	0.802	72.0	0.463	0.726	156.2	407.8	0.390	1.062	-0.18	1.794	104.7	250.0	-0.4	0.766
		7.90	20.59	28.49	TWO	1.111	44.0	0.0	26.0										
44200.0	44348.0	0.341	1.3	19.6	7.62	0.795	75.6	0.441	0.718	160.1	401.7	0.401	1.034	-1.58	1.790	102.4	253.3	-3.9	0.713
		7.19	19.01	26.20	TWO	1.111	44.0	0.0	29.5										
44210.0	44348.0	0.314	1.2	24.1	8.56	0.788	79.4	0.423	0.710	164.9	396.5	0.410	1.011	-3.28	1.786	100.6	256.0	-8.6	0.673
		6.66	17.83	24.49	TWO	1.111	44.0	0.0	33.1										
44220.0	44348.0	0.300	357.8	28.8	10.12	0.783	83.5	0.410	0.705	170.5	392.1	0.416	0.994	-5.55	1.783	99.2	258.2	-15.2	0.650
		6.40	17.16	23.56	TWO	1.111	44.0	0.0	37.0										
44230.0	44348.0	0.311	350.6	33.3	12.86	0.780	88.1	0.402	0.702	177.1	388.7	0.420	0.984	-8.95	1.781	98.1	259.1	-24.8	0.655
		6.60	17.31	23.91	TWO	1.111	44.0	0.0	42.1										
44240.0	44348.0	0.371	341.4	37.8	18.33	0.783	93.2	0.400	0.704	184.8	386.6	0.422	0.986A	-15.05	1.782	97.5	257.2	-39.3	0.723
		7.82	19.32	27.14	TWO	1.111	44.0	0.0	49.7										
44250.0	44348.0	0.568	336.3	43.1	32.65	0.794	99.2	0.408	0.713	193.9	386.4	0.422	1.003A	-29.97	1.787	97.6	240.0	-61.1	1.011
		12.39	27.80	40.20	TWO	1.111	44.0	0.0	62.3										
								ARRIVAL DATE = 2444350.0											
44160.0	44350.0	0.558	342.7	2.4	7.23	0.823	57.8	0.599	0.754	149.4	437.2	0.302	1.205	3.51	1.834	117.3	240.7	5.1	1.123
		12.15	31.12	43.27	TWO	1.138	50.5	0.0	11.4										

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EARTH-MERCURY

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44170.0	44350.0	0.500	349.7	6.5	6.95	0.815	62.1	0.556	0.743	150.6	428.5	0.330	1.156	2.26	1.828	113.2	244.8	3.7	1.016
		10.72	27.94	38.66	TWO	1.138	50.5	0.0	14.8										
44180.0	44350.0	0.448	355.7	10.6	6.89	0.806	66.1	0.519	0.732	152.6	420.6	0.352	1.112	1.05	1.823	109.8	248.6	2.0	0.925
		9.50	25.26	34.76	TWO	1.138	50.5	0.0	18.2										
44190.0	44350.0	0.402	0.5	14.6	7.04	0.798	69.9	0.488	0.723	155.4	413.5	0.370	1.075	-0.17	1.818	106.9	252.0	-0.4	0.849
		8.48	23.01	31.49	TWO	1.138	50.5	0.0	21.6										
44200.0	44350.0	0.362	3.7	18.8	7.42	0.790	73.8	0.463	0.714	159.1	407.1	0.383	1.044	-1.50	1.813	104.5	255.1	-3.3	0.786
		7.64	21.17	28.80	TWO	1.138	50.5	0.0	24.9										
44210.0	44350.0	0.330	4.7	22.9	8.12	0.782	77.7	0.442	0.706	163.5	401.5	0.394	1.018	-3.03	1.809	102.4	257.8	-7.3	0.738
		6.98	19.74	26.71	TWO	1.138	50.5	0.0	28.3										
44220.0	44350.0	0.308	2.6	27.1	9.28	0.776	81.9	0.427	0.700	168.8	396.8	0.401	0.998	-4.95	1.805	100.8	260.0	-12.5	0.705
		6.55	18.78	25.33	TWO	1.138	50.5	0.0	31.9										
44230.0	44350.0	0.305	356.8	31.1	11.23	0.773	86.5	0.417	0.696	175.1	393.1	0.406	0.986	-7.61	1.803	99.6	261.4	-19.8	0.694
		6.48	18.46	24.94	TWO	1.138	50.5	0.0	36.2										
44240.0	44350.0	0.334	348.2	34.7	14.77	0.774	91.7	0.412	0.697	182.5	390.5	0.409	0.984A	-11.81	1.804	98.8	261.1	-30.4	0.722
		7.06	19.27	26.34	TWO	1.138	50.5	0.0	42.1										
44250.0	44350.0	0.434	340.1	38.7	22.37	0.782	97.7	0.417	0.703	191.1	389.4	0.410	0.997A	-20.04	1.807	98.5	255.9	-46.3	0.848
		9.19	22.98	32.17	TWO	1.138	50.5	0.0	51.4										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
									ARRIVAL DATE = 2444656.0										
44510.0	44656.0	0.517	316.4	8.0	16.94	0.780	64.9	0.552	0.721	154.9	312.5	0.323D	1.119	-12.79	2.022	73.5	252.0	-24.6	1.032
		11.13	28.42	39.54	ONE	0.638	265.8	0.0	152.0										
44520.0	44656.0	0.478	325.4	5.0	12.11	0.761	66.2	0.558	0.703	157.5	305.7	0.311D	1.095	-7.38	2.013	71.1	253.1	-13.6	1.042
		10.20	28.72	38.92	ONE	0.638	265.8	0.0	161.5										
44530.0	44656.0	0.456	332.4	4.1	9.60	0.739	67.9	0.566	0.684	160.4	298.8	0.297D	1.072	-4.26	2.004	68.7	255.4	-7.3	1.091
		9.70	30.17	39.87	ONE	0.638	265.8	0.0	167.3										
44540.0	44656.0	0.441	338.1	4.2	8.14	0.715	69.9	0.577	0.666	163.5	292.1	0.282D	1.049	-2.15	1.993	66.3	258.0	-3.4	1.151
		9.35	31.96	41.31	ONE	0.638	265.8	0.0	171.5										
44550.0	44656.0	0.429	342.5	4.6	7.25	0.688	72.5	0.589	0.647	166.8	285.5	0.266D	1.029	-0.54	1.983	63.9	260.5	-0.8	1.216
		9.08	33.86	42.94	ONE	0.638	265.8	0.0	174.6										
44560.0	44656.0	0.420	345.4	4.9	6.71	0.659	76.1	0.604	0.630	170.4	279.1	0.249D	1.010	0.79	1.972	61.4	262.9	1.1	1.281
		8.87	35.81	44.68	ONE	0.638	265.8	0.0	176.9										
44570.0	44656.0	0.415	346.6	4.8	6.43	0.630	81.0	0.621	0.614	174.4	273.0	0.233D	0.994	1.98	1.961	59.0	265.2	2.5	1.347
		8.78	37.77	46.55	ONE	0.638	265.8	0.0	177.5										
44580.0	44656.0	0.421	345.7	3.8	6.36	0.605	87.9	0.640	0.601	178.8	267.4	0.216D	0.986	3.11	1.952	56.6	267.4	3.6	1.414
		8.89	39.75	48.64	ONE	0.638	265.8	0.0	176.1										
44590.0	44656.0	0.444	342.6	1.9	6.49	0.592	97.7	0.663	0.595	184.0	262.4	0.200D	0.989A	4.25	1.948	54.2	269.3	4.5	1.482
		9.43	41.78	51.21	ONE	0.638	265.8	0.0	174.3										
44600.0	44656.0	0.503	337.9	-0.9	6.84	0.610	110.7	0.691	0.602	190.1	258.4	0.186D	1.017A	5.48	1.953	51.8	270.9	5.4	1.556
		10.80	43.98	54.78	ONE	0.638	265.8	0.0	172.6										
									ARRIVAL DATE = 2444658.0										
44510.0	44658.0	0.563	310.8	16.0	24.95	0.790	66.7	0.524	0.729	154.3	320.3	0.347D	1.111	-20.42	1.984	76.6	260.9	-39.4	1.061
		12.28	29.28	41.55	ONE	0.645	274.5	0.0	138.7										
44520.0	44658.0	0.470	322.9	9.9	14.93	0.773	68.2	0.527	0.712	157.1	313.8	0.337D	1.087	-9.89	1.976	74.4	257.9	-19.9	0.962
		10.01	26.36	36.36	ONE	0.645	274.5	0.0	154.3										
44530.0	44658.0	0.433	331.0	7.2	10.79	0.754	70.0	0.532	0.695	160.0	307.1	0.325D	1.065	-5.21	1.967	72.2	259.7	-9.9	0.985
		9.17	27.05	36.21	ONE	0.645	274.5	0.0	162.2										
44540.0	44658.0	0.411	337.0	6.2	8.62	0.733	72.2	0.540	0.677	163.2	300.5	0.312D	1.043	-2.48	1.957	70.0	262.1	-4.4	1.035
		8.68	28.50	37.18	ONE	0.645	274.5	0.0	166.9										
44550.0	44658.0	0.395	341.4	6.0	7.35	0.710	74.9	0.549	0.660	166.8	294.1	0.298D	1.023	-0.60	1.948	67.7	264.7	-1.0	1.091
		8.32	30.16	38.48	ONE	0.645	274.5	0.0	170.1										
44560.0	44658.0	0.382	344.1	5.8	6.58	0.686	78.4	0.560	0.644	170.6	288.0	0.283D	1.006	0.84	1.938	65.6	267.1	1.3	1.148
		8.06	31.87	39.92	ONE	0.645	274.5	0.0	172.5										
44570.0	44658.0	0.376	344.8	5.2	6.12	0.664	83.2	0.574	0.630	174.9	282.2	0.269D	0.992	2.05	1.929	63.4	269.4	2.9	1.206
		7.91	33.57	41.48	ONE	0.645	274.5	0.0	174.1										
44580.0	44658.0	0.379	343.3	3.8	5.88	0.645	89.7	0.590	0.620	179.8	277.0	0.254D	0.985	3.13	1.922	61.4	271.4	4.2	1.263
		7.98	35.26	43.25	ONE	0.645	274.5	0.0	174.8										
44590.0	44658.0	0.402	339.5	1.3	5.84	0.639	98.4	0.609	0.616	185.5	272.6	0.241D	0.991A	4.17	1.919	59.4	273.1	5.2	1.320
		8.48	36.96	45.44	ONE	0.645	274.5	0.0	174.6										
44600.0	44658.0	0.460	334.4	-1.9	5.99	0.661	109.8	0.634	0.626	192.5	269.5	0.229D	1.024A	5.23	1.926	57.5	274.4	6.2	1.380
		9.78	38.74	48.52	ONE	0.645	274.5	0.0	173.8										
44610.0	44658.0	0.575	329.4	-5.2	6.35	0.739	123.2	0.671	0.672	201.5	268.4	0.221D	1.122A	6.38	1.954	55.7	275.0	7.1	1.450
		12.56	40.83	53.39	ONE	0.645	274.5	0.0	172.9										
									ARRIVAL DATE = 2444660.0										
44520.0	44660.0	0.493	318.3	16.7	20.29	0.783	69.9	0.500	0.720	156.7	321.5	0.360D	1.080	-14.96	1.940	77.4	263.6	-31.5	0.935
		10.56	25.55	36.11	ONE	0.658	282.7	0.0	143.7										
44530.0	44660.0	0.419	328.8	11.0	12.56	0.766	71.8	0.502	0.704	159.8	315.1	0.350D	1.058	-6.77	1.931	75.3	263.4	-14.3	0.895
		8.86	24.37	33.24	ONE	0.658	282.7	0.0	156.1										
44540.0	44660.0	0.387	335.6	8.5	9.24	0.748	74.1	0.507	0.688	163.2	308.7	0.339D	1.037	-2.97	1.923	73.3	265.7	-5.9	0.928
		8.15	25.37	33.51	ONE	0.658	282.7	0.0	162.0										
44550.0	44660.0	0.366	340.1	7.4	7.47	0.729	76.9	0.513	0.673	166.9	302.5	0.327D	1.018	-0.68	1.914	71.2	268.2	-1.3	0.976
		7.70	26.78	34.48	ONE	0.658	282.7	0.0	165.4										
44560.0	44660.0	0.350	342.5	6.6	6.43	0.710	80.4	0.522	0.658	171.0	296.6	0.315D	1.002	0.92	1.906	69.3	270.7	1.6	1.027
		7.39	28.27	35.65	ONE	0.658	282.7	0.0	167.9										
44570.0	44660.0	0.342	342.7	5.4	5.79	0.692	85.1	0.532	0.646	175.6	291.2	0.302D	0.990	2.17	1.898	67.4	272.9	3.5	1.077
		7.21	29.75	36.96	ONE	0.658	282.7	0.0	169.6										
44580.0	44660.0	0.344	340.5	3.3	5.42	0.680	91.2	0.545	0.638	181.0	286.4	0.290D	0.985A	3.22	1.893	65.6	274.9	4.9	1.125
		7.27	31.19	38.45	ONE	0.658	282.7	0.0	170.7										
44590.0	44660.0	0.368	336.0	0.3	5.25	0.680	99.1	0.561	0.637	187.3	282.6	0.279D	0.994A	4.18	1.892	64.0	276.4	6.1	1.173
		7.75	32.59	40.34	ONE	0.658	282.7	0.0	171.3										
44600.0	44660.0	0.426	330.6	-3.3	5.24	0.706	109.3	0.584	0.651	195.1	280.3	0.271D	1.031A	5.11	1.901	62.5	277.4	7.1	1.221
		9.02	34.03	43.05	ONE	0.658	282.7	0.0	171.2										
44610.0	44660.0	0.540	325.8	-6.6	5.41	0.781	121.2	0.621	0.702	205.3	280.4	0.266D	1.138A	6.07	1.930	61.2	277.5	8.1	1.276
		11.69	35.67	47.36	ONE	0.658	282.7	0.0	170.4										
									ARRIVAL DATE = 2444662.0										
44530.0	44662.0	0.423	325.4	16.3	15.66	0.777	73.4	0.477	0.713	159.8	322.7	0.373D	1.052	-9.67	1.898	78.2	266.9	-22.1	0.831
		8.95	22.48	31.43	ONE	0.676	290.5	0.0	148.2										
44540.0	44662.0	0.369	333.7	11.3	10.13	0.762	75.7	0.479	0.698	163.3	316.5	0.364D	1.032	-3.73	1.891	76.3	268.5	-8.2	0.834
		7.77	22.57	30.35	ONE	0.676	290.5	0.0	156.6										
44550.0	44662.0	0.341	338.5	8.8	7.63	0.746	78.6	0.483	0.684	167.2	310.5	0.354D	1.014	-0.80	1.883	74.4	271.1	-1.7	0.872
		7.20	23.71	30.91	ONE	0.676	290.5	0.0	160.6										
44560.0	44662.0	0.323	340.8	7.1	6.26	0.730	82.1	0.488	0.671	171.6	304.9	0.343D	0.999	1.03	1.875	72.6	273.6	2.0	0.916
		6.84	25.01	31.85	ONE	0.676	290.5	0.0	163.1										
44570.0	44662.0	0.313	340.5	5.3	5.44	0.716	86.6	0.496	0.661	176.6	299.8	0.333D	0.988	2.34	1.869	71.0	275.9	4.3	0.960
		6.65	26.29	32.94	ONE	0.676	290.5	0.0	164.8										
44580.0	44662.0	0.316	337.5	2.6	4.95	0.709	92.4	0.506	0.655	182.4	295.5	0.323D	0.986A	3.38	1.865	69.4	277.7	5.9	1.001
		6.71	27.51	34.22	ONE	0.676	290.5	0.0	166.0										
44590.0	44662.0	0.341	332.5	-1.0	4.67	0.713	99.8	0.521	0.656	189.3	292.4	0.315D	0.998A	4.28	1.866	68.1	279.1	7.1	1.040
		7.20	28.67	35.87	ONE	0.676	290.5	0.0	166.6										
44600.0	44662.0	0.402	326.9	-4.9	4.55	0.743	109.0	0.542	0.675	198.0	290.9	0.309D	1.040A	5.10	1.877	67.0	279.8	8.2	1.079
		8.47	29.82	38.29	ONE	0.676	290.5	0.0	166.6										
44610.0	44662.0	0.514	322.4	-8.1	4.58	0.817	119.8	0.579	0.732	209.2	292.0	0.308D	1.156A	5.91	1.908	66.2	279.4	9.2	1.122
		11.08	31.10	42.17	ONE	0.676	290.5	0.0	165.7										
									ARRIVAL DATE = 2444664.0										
44510.0	44664.0	0.475	336.7	-46.3	-20.06	0.812	71.0	0.458	0.748	153.6	344.8	0.406D	1.090	25.57	1.882	85.2	273.4	58.3	0.951
		10.13	26.03	36.16	TWO	0.699	297.8	0.0	118.6										
44530.0	44664.0	0.479	318.8	24.1	22.80	0.787	74.7	0.455	0.720	159.8	329.8	0.393D	1.048	-16.62	1.868	80.7	272.7	-38.5	0.848
		10.23	22.98	33.20	ONE	0.699	297.8	0.0	135.2										
44540.0	44664.0	0.360	331.2	14.8	11.55	0.773	77.1	0.454	0.707	163.5	324.0	0.386D	1.028	-5.04	1.861	79.0	270.8	-12.3	0.753
		7.59	20.19	27.78	ONE	0.699	297.8	0.0	150.5										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44550.0	44664.0	0.322	336.8	10.2	7.83	0.760	80.0	0.456	0.694	167.6	318.3	0.377D	1.010	-0.97	1.854	77.2	273.3	-2.3	0.779
		6.81	20.65	27.77	ONE	0.699	297.8	0.0	155.4										
44560.0	44664.0	0.300	339.0	7.5	6.05	0.747	83.5	0.460	0.683	172.3	312.9	0.369D	0.996	1.18	1.847	75.6	275.9	2.6	0.817
		6.40	22.07	28.48	ONE	0.699	297.8	0.0	158.0										
44570.0	44664.0	0.289	338.1	4.8	5.05	0.737	87.9	0.465	0.674	177.6	308.2	0.360D	0.987	2.58	1.842	74.2	278.2	5.3	0.855
		6.20	23.19	29.39	ONE	0.699	297.8	0.0	159.7										
44580.0	44664.0	0.293	334.5	1.4	4.45	0.733	93.5	0.474	0.670	183.9	304.4	0.353D	0.987A	3.61	1.840	72.9	280.0	7.1	0.890
		6.27	24.23	30.50	ONE	0.699	297.8	0.0	160.9										
44590.0	44664.0	0.321	329.1	-2.6	4.09	0.742	100.5	0.486	0.675	191.5	301.8	0.347D	1.003A	4.44	1.843	71.8	281.2	8.5	0.922
		6.79	25.19	31.98	ONE	0.699	297.8	0.0	161.5										
44600.0	44664.0	0.383	323.5	-6.6	3.89	0.773	109.0	0.507	0.697	200.9	301.1	0.343D	1.050A	5.18	1.855	71.0	281.6	9.6	0.953
		8.07	26.10	34.17	ONE	0.699	297.8	0.0	161.3										
44610.0	44664.0	0.496	319.5	-9.7	3.83	0.847	118.8	0.547	0.760	213.0	303.0	0.344D	1.175A	5.87	1.887	70.5	280.7	10.6	0.987
		10.64	27.09	37.73	ONE	0.699	297.8	0.0	160.0										
ARRIVAL DATE = 2444666.0																			
44510.0	44666.0	0.384	333.9	-33.2	-10.18	0.817	71.8	0.444	0.753	153.4	351.2	0.418D	1.087	15.99	1.853	87.3	262.7	46.1	0.708
		8.10	18.88	26.97	TWO	0.724	304.8	0.0	121.0										
44520.0	44666.0	0.473	344.8	-48.2	-22.05	0.806	73.8	0.438	0.739	156.6	344.9	0.416D	1.063	28.13	1.847	85.4	282.6	62.1	0.982
		10.08	26.94	37.02	TWO	0.724	304.8	0.0	115.7										
44540.0	44666.0	0.369	327.4	20.0	14.36	0.783	78.3	0.434	0.714	163.8	331.2	0.404D	1.024	-7.75	1.834	81.4	272.6	-20.6	0.696
		7.78	18.52	26.30	ONE	0.724	304.8	0.0	142.5										
44550.0	44666.0	0.306	335.0	11.8	8.14	0.771	81.2	0.434	0.703	168.1	325.7	0.398D	1.007	-1.25	1.827	79.8	274.7	-3.2	0.696
		6.52	18.50	25.02	ONE	0.724	304.8	0.0	149.7										
44560.0	44666.0	0.281	337.3	7.5	5.78	0.761	84.7	0.435	0.693	173.1	320.7	0.391D	0.994	1.40	1.822	78.3	277.4	3.4	0.728
		6.05	19.46	25.51	ONE	0.724	304.8	0.0	152.5										
44570.0	44666.0	0.270	336.0	3.9	4.59	0.754	89.0	0.439	0.686	178.7	316.3	0.384D	0.987	2.90	1.818	77.0	279.8	6.8	0.761
		5.85	20.44	26.29	ONE	0.724	304.8	0.0	154.2										
44580.0	44666.0	0.275	331.8	-0.2	3.90	0.753	94.4	0.446	0.684	185.5	312.9	0.379D	0.989A	3.91	1.817	75.9	281.6	8.7	0.792
		5.94	21.33	27.27	ONE	0.724	304.8	0.0	155.3										
44590.0	44666.0	0.305	325.9	-4.5	3.48	0.765	101.0	0.458	0.691	193.6	310.9	0.374D	1.007A	4.69	1.821	75.1	282.6	10.1	0.818
		6.49	22.12	28.61	ONE	0.724	304.8	0.0	155.8										
44600.0	44666.0	0.370	320.5	-8.5	3.24	0.799	109.0	0.480	0.716	203.7	310.8	0.373D	1.060A	5.33	1.835	74.6	282.7	11.2	0.843
		7.79	22.84	30.64	ONE	0.724	304.8	0.0	155.3										
44610.0	44666.0	0.483	317.0	-11.3	3.12	0.871	118.1	0.522	0.784	216.5	313.4	0.375D	1.194A	5.91	1.867	74.4	281.2	12.3	0.870
		10.33	23.63	33.96	ONE	0.724	304.8	0.0	153.6										
ARRIVAL DATE = 2444668.0																			
44510.0	44668.0	0.352	331.6	-25.3	-5.72	0.821	72.4	0.433	0.756	153.3	357.6	0.429D	1.083	11.82	1.827	89.3	258.3	39.0	0.594
		7.43	15.54	22.96	TWO	0.751	311.4	0.0	117.8										
44520.0	44668.0	0.352	340.2	-31.4	-9.42	0.811	74.5	0.425	0.744	156.5	351.0	0.428D	1.060	15.73	1.821	87.3	266.9	46.1	0.684
		7.42	18.17	25.58	TWO	0.751	311.4	0.0	119.6										
44530.0	44668.0	0.524	351.9	-53.2	-28.13	0.801	76.8	0.420	0.732	160.2	345.2	0.425D	1.039	34.64	1.815	85.6	301.3	68.9	1.103
		11.31	30.53	41.84	TWO	0.751	311.4	0.0	110.8										
44540.0	44668.0	0.451	319.2	28.9	22.91	0.791	79.2	0.417	0.720	164.0	338.0	0.420D	1.021	-16.20	1.809	83.6	277.4	-42.4	0.744
		9.57	19.93	29.50	ONE	0.751	311.4	0.0	127.8										
44550.0	44668.0	0.297	333.0	13.8	8.68	0.781	82.1	0.415	0.710	168.6	332.9	0.415D	1.005	-1.75	1.803	82.1	275.2	-5.0	0.623
		6.33	16.36	22.70	ONE	0.751	311.4	0.0	143.4										
44560.0	44668.0	0.264	335.8	7.1	5.41	0.773	85.6	0.415	0.701	173.8	328.1	0.410D	0.993	1.73	1.799	80.8	278.1	4.7	0.650
		5.76	17.17	22.93	ONE	0.751	311.4	0.0	146.4										
44570.0	44668.0	0.253	334.1	2.4	4.01	0.768	89.9	0.418	0.696	179.9	324.1	0.405D	0.987	3.35	1.796	79.6	280.6	8.7	0.680
		5.57	18.04	23.61	ONE	0.751	311.4	0.0	148.1										
44580.0	44668.0	0.260	329.3	-2.2	3.27	0.770	95.1	0.424	0.696	187.0	321.1	0.401D	0.991A	4.33	1.795	78.7	282.4	10.8	0.706
		5.69	18.80	24.49	ONE	0.751	311.4	0.0	149.2										
44590.0	44668.0	0.293	323.3	-6.7	2.83	0.784	101.4	0.436	0.705	195.6	319.5	0.398D	1.012A	5.02	1.801	78.0	283.3	12.2	0.728
		6.27	19.46	25.72	ONE	0.751	311.4	0.0	149.5										
44600.0	44668.0	0.361	318.1	-10.4	2.56	0.819	109.0	0.458	0.733	206.2	320.0	0.398D	1.069A	5.57	1.816	77.7	282.9	13.3	0.748
		7.59	20.04	27.63	ONE	0.751	311.4	0.0	148.8										
44610.0	44668.0	0.473	315.1	-12.8	2.41	0.890	117.6	0.503	0.805	219.5	323.1	0.400D	1.211A	6.03	1.849	77.8	280.9	14.3	0.770
		10.10	20.69	30.79	ONE	0.751	311.4	0.0	146.6										
ARRIVAL DATE = 2444670.0																			
44510.0	44670.0	0.337	329.9	-20.1	-3.15	0.824	72.9	0.424	0.759	153.2	363.7	0.437	1.081	9.53	1.804	91.1	254.2	34.7	0.525
		7.12	13.52	20.64	TWO	0.780	317.8	0.0	111.4										
44520.0	44670.0	0.319	336.9	-21.7	-4.52	0.815	75.0	0.415	0.748	156.5	357.2	0.437D	1.058	11.05	1.799	89.2	261.9	37.4	0.567
		6.77	14.75	21.52	TWO	0.780	317.8	0.0	116.4										
44530.0	44670.0	0.319	345.1	-29.6	-8.51	0.806	77.4	0.408	0.736	160.2	351.1	0.436D	1.037	15.18	1.793	87.4	270.2	45.8	0.654
		6.76	17.28	24.04	TWO	0.780	317.8	0.0	118.0										
44550.0	44670.0	0.295	330.5	16.9	9.88	0.789	82.9	0.400	0.716	169.1	339.7	0.430D	1.003	-2.93	1.782	84.2	274.7	-9.3	0.562
		6.31	14.61	20.91	ONE	0.780	317.8	0.0	136.1										
44560.0	44670.0	0.250	334.8	5.9	4.83	0.782	86.4	0.399	0.709	174.5	335.2	0.426D	0.992	2.26	1.778	83.0	277.9	6.9	0.583
		5.52	15.20	20.72	ONE	0.780	317.8	0.0	139.6										
44570.0	44670.0	0.239	332.7	0.2	3.25	0.779	90.6	0.401	0.704	180.9	331.4	0.422D	0.987A	3.98	1.776	81.9	280.6	11.6	0.610
		5.34	16.00	21.34	ONE	0.780	317.8	0.0	141.3										
44580.0	44670.0	0.249	327.5	-4.8	2.51	0.783	95.6	0.406	0.706	188.4	328.8	0.419D	0.992A	4.88	1.776	81.1	282.3	13.7	0.633
		5.49	16.66	22.15	ONE	0.780	317.8	0.0	142.3										
44590.0	44670.0	0.284	321.2	-9.1	2.10	0.798	101.7	0.418	0.717	197.4	327.7	0.417D	1.016A	5.46	1.783	80.6	283.1	14.9	0.651
		6.11	17.20	23.31	ONE	0.780	317.8	0.0	142.6										
44600.0	44670.0	0.353	316.2	-12.4	1.85	0.834	108.9	0.441	0.747	208.4	328.6	0.418D	1.077A	5.89	1.799	80.5	282.4	15.8	0.668
		7.45	17.68	25.13	ONE	0.780	317.8	0.0	141.6										
44610.0	44670.0	0.466	313.6	-14.4	1.70	0.904	117.2	0.489	0.822	222.0	331.9	0.420D	1.224A	6.24	1.832	80.9	279.7	16.6	0.687
		9.92	18.25	28.17	ONE	0.780	317.8	0.0	138.9										
ARRIVAL DATE = 2444672.0																			
44510.0	44672.0	0.329	328.7	-16.4	-1.44	0.826	73.2	0.418	0.761	153.1	369.7	0.443	1.080	8.11	1.784	92.9	249.5	31.5	0.481
		6.97	12.24	19.21	TWO	0.810	324.0	0.0	103.2										
44520.0	44672.0	0.307	334.7	-15.8	-1.90	0.818	75.4	0.408	0.750	156.5	363.3	0.444	1.056	8.65	1.779	90.9	257.5	32.2	0.502
		6.53	12.85	19.37	TWO	0.810	324.0	0.0	109.7										
44530.0	44672.0	0.286	340.3	-17.2	-2.95	0.810	77.8	0.399	0.740	160.3	357.2	0.445D	1.035	9.78	1.774	89.2	264.5	34.4	0.533
		6.15	13.75	19.90	TWO	0.810	324.0	0.0	114.8										
44540.0	44672.0	0.284	347.7	-27.2	-7.08	0.802	80.5	0.393	0.730	164.6	351.6	0.443D	1.017	13.98	1.769	87.6	272.2	44.2	0.613
		6.10	16.08	22.18	TWO	0.810	324.0	0.0	116.3										
44550.0	44672.0	0.342	323.8	26.3	15.51	0.795	83.5	0.388	0.721	169.5	346.3	0.441D	1.002	-8.54	1.764	86.2	274.4	-28.2	0.553
		7.22	14.34	21.56	ONE	0.810	324.0	0.0	124.9										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44560.0	44672.0	0.237	334.7	3.1	3.76	0.790	87.0	0.386	0.715	175.1	342.0	0.4390	0.991	3.29	1.760	85.0	276.7	11.0	0.529
		5.30	13.63	18.92	ONE	0.810	324.0	0.0	131.7										
44570.0	44672.0	0.228	332.2	-3.4	2.17	0.788	91.1	0.387	0.712	181.7	338.5	0.4360	0.987A	4.96	1.758	84.0	279.6	15.8	0.555
		5.16	14.38	19.54	ONE	0.810	324.0	0.0	133.5										
44580.0	44672.0	0.239	326.3	-8.1	1.56	0.793	96.0	0.392	0.714	189.5	336.1	0.4340	0.994A	5.65	1.760	83.3	281.4	17.5	0.574
		5.34	14.93	20.28	ONE	0.810	324.0	0.0	134.6										
44590.0	44672.0	0.277	315.8	-11.9	1.24	0.810	101.9	0.404	0.726	198.9	335.3	0.4330	1.020A	6.05	1.767	83.0	281.9	18.3	0.589
		5.98	15.37	21.36	ONE	0.810	324.0	0.0	134.8										
44600.0	44672.0	0.348	314.9	-14.5	1.06	0.846	108.9	0.428	0.759	210.2	336.5	0.4340	1.083A	6.32	1.783	83.0	280.8	18.9	0.602
		7.33	15.78	23.11	ONE	0.810	324.0	0.0	133.7										
44610.0	44672.0	0.459	312.7	-15.9	0.95	0.914	116.8	0.478	0.835	223.8	339.9	0.4360	1.234A	6.53	1.816	83.5	277.6	19.3	0.620
		9.77	16.30	26.06	ONE	0.810	324.0	0.0	130.6										
ARRIVAL DATE = 2444674.0																			
44510.0	44674.0	0.326	327.8	-13.5	-0.19	0.828	73.3	0.415	0.763	153.0	375.5	0.446	1.080	7.14	1.767	94.5	244.2	28.8	0.455
		6.91	11.51	18.41	TWO	0.840	330.0	0.0	93.7										
44520.0	44674.0	0.301	333.3	-11.7	-0.24	0.820	75.6	0.403	0.753	156.4	369.1	0.449	1.056	7.21	1.762	92.6	252.6	28.5	0.462
		6.43	11.71	18.14	TWO	0.840	330.0	0.0	101.1										
44530.0	44674.0	0.278	337.6	-10.4	-0.34	0.813	78.1	0.393	0.742	160.3	363.1	0.451	1.034	7.31	1.757	90.9	259.9	28.2	0.474
		5.99	12.04	18.03	TWO	0.840	330.0	0.0	107.5										
44540.0	44674.0	0.256	340.6	-10.1	-0.58	0.806	80.8	0.385	0.733	164.7	357.6	0.4510	1.016	7.57	1.752	89.3	266.1	28.2	0.489
		5.61	12.47	18.08	TWO	0.840	330.0	0.0	112.8										
44550.0	44674.0	0.240	343.9	-16.3	-2.62	0.800	83.9	0.380	0.725	169.8	352.6	0.4500	1.001	9.62	1.748	88.0	271.8	33.7	0.527
		5.34	13.56	18.91	TWO	0.840	330.0	0.0	116.0										
44560.0	44674.0	0.223	337.2	-5.6	1.04	0.796	87.3	0.377	0.719	175.6	348.4	0.4480	0.990	5.98	1.745	86.8	274.7	21.3	0.500
		5.08	12.79	17.87	ONE	0.840	330.0	0.0	122.1										
44570.0	44674.0	0.219	333.0	-9.4	0.44	0.795	91.4	0.377	0.717	182.4	345.1	0.4470	0.987A	6.59	1.744	85.9	277.7	22.7	0.518
		5.02	13.31	18.33	ONE	0.840	330.0	0.0	124.4										
44580.0	44674.0	0.233	326.1	-12.6	0.28	0.801	96.3	0.381	0.720	190.4	343.0	0.4460	0.995A	6.75	1.745	85.3	279.5	22.7	0.530
		5.24	13.68	18.91	ONE	0.840	330.0	0.0	126.0										
44590.0	44674.0	0.272	319.2	-15.2	0.21	0.818	102.1	0.394	0.734	200.0	342.4	0.4450	1.023A	6.83	1.753	85.0	279.8	22.6	0.541
		5.89	13.59	19.89	ONE	0.840	330.0	0.0	126.3										
44600.0	44674.0	0.343	314.3	-16.8	0.18	0.854	108.8	0.419	0.767	211.5	343.7	0.4460	1.088A	6.88	1.769	85.2	278.3	22.5	0.553
		7.24	14.32	21.56	ONE	0.840	330.0	0.0	125.0										
44610.0	44674.0	0.453	312.3	-17.5	0.15	0.921	116.4	0.469	0.843	225.0	347.0	0.4470	1.238A	6.92	1.802	85.9	274.5	22.3	0.570
		9.63	14.83	24.46	ONE	0.840	330.0	0.0	121.6										
ARRIVAL DATE = 2444676.0																			
44510.0	44676.0	0.327	327.2	-11.2	0.78	0.829	73.3	0.414	0.764	152.8	381.1	0.447	1.081	6.46	1.753	96.1	238.7	26.1	0.446
		6.91	11.24	18.16	TWO	0.870	335.8	0.0	83.7										
44520.0	44676.0	0.300	332.3	-8.8	0.93	0.822	75.7	0.400	0.754	156.2	374.7	0.452	1.056	6.25	1.748	94.2	247.3	25.4	0.442
		6.41	11.12	17.52	TWO	0.870	335.8	0.0	91.4										
44530.0	44676.0	0.276	336.0	-6.2	1.21	0.815	78.2	0.389	0.744	160.2	368.8	0.455	1.034	5.92	1.743	92.5	254.9	24.0	0.441
		5.95	11.10	17.06	TWO	0.870	335.8	0.0	98.3										
44540.0	44676.0	0.253	337.7	-3.2	1.81	0.808	81.0	0.380	0.736	164.7	363.3	0.456	1.015	5.26	1.739	90.9	261.3	21.2	0.442
		5.57	11.12	16.68	TWO	0.870	335.8	0.0	104.5										
44550.0	44676.0	0.239	335.4	3.7	3.86	0.803	84.1	0.373	0.728	169.9	358.5	0.4560	1.000	3.16	1.735	89.6	266.5	12.7	0.436
		5.34	10.95	16.29	TWO	0.870	335.8	0.0	110.2										
44560.0	44676.0	0.408	1.9	-52.8	-22.16	0.800	87.6	0.370	0.723	175.8	354.3	0.4560	0.990	29.13	1.732	88.5	291.9	73.1	0.881
		8.61	23.97	32.58	ONE	0.870	335.8	0.0	102.1										
44570.0	44676.0	0.219	336.9	-21.1	-2.90	0.800	91.6	0.369	0.721	182.8	351.3	0.4550	0.987A	9.82	1.731	87.6	275.3	34.8	0.517
		5.02	13.30	18.32	ONE	0.870	335.8	0.0	113.9										
44580.0	44676.0	0.230	327.4	-19.0	-1.57	0.807	96.4	0.374	0.725	191.0	349.3	0.4540	0.996A	8.44	1.733	87.1	276.7	30.0	0.508
		5.19	13.04	18.23	ONE	0.870	335.8	0.0	116.4										
44590.0	44676.0	0.269	319.5	-19.2	-1.10	0.824	102.1	0.386	0.739	200.7	348.9	0.4540	1.024A	7.91	1.741	86.9	276.7	27.9	0.511
		5.84	13.11	18.95	ONE	0.870	335.8	0.0	117.0										
44600.0	44676.0	0.339	314.3	-19.4	-0.87	0.859	108.6	0.411	0.772	212.3	350.2	0.4540	1.090A	7.62	1.757	87.2	274.9	26.7	0.519
		7.16	13.34	20.50	ONE	0.870	335.8	0.0	115.8										
44610.0	44676.0	0.447	312.4	-19.2	-0.73	0.923	116.0	0.462	0.847	225.7	353.5	0.4550	1.238A	7.43	1.789	87.9	270.6	25.6	0.536
		9.49	13.84	23.33	ONE	0.870	335.8	0.0	112.3										
ARRIVAL DATE = 2444678.0																			
44510.0	44678.0	0.330	326.8	-9.4	1.57	0.829	73.1	0.416	0.764	152.5	386.5	0.446	1.083	5.97	1.742	97.7	233.7	23.4	0.452
		6.98	11.40	18.38	TWO	0.900	341.5	0.0	73.7										
44520.0	44678.0	0.302	331.7	-6.5	1.82	0.823	75.6	0.400	0.755	156.0	380.2	0.452	1.057	5.58	1.737	95.7	242.1	22.6	0.437
		6.44	10.98	17.43	TWO	0.900	341.5	0.0	81.3										
44530.0	44678.0	0.277	335.1	-3.3	2.25	0.816	78.2	0.388	0.745	160.0	374.3	0.457	1.034	5.03	1.732	94.0	249.7	20.7	0.427
		5.98	10.70	16.68	TWO	0.900	341.5	0.0	88.3										
44540.0	44678.0	0.255	336.4	0.6	3.08	0.810	81.0	0.377	0.737	164.6	368.9	0.459	1.015	4.08	1.728	92.4	256.3	17.0	0.420
		5.59	10.48	16.08	TWO	0.900	341.5	0.0	94.6										
44550.0	44678.0	0.243	333.8	7.6	5.13	0.805	84.1	0.370	0.730	169.8	364.2	0.460	1.000	1.92	1.724	91.1	261.8	8.1	0.412
		5.40	10.25	15.64	TWO	0.900	341.5	0.0	100.2										
44560.0	44678.0	0.338	319.7	30.0	16.68	0.803	87.7	0.365	0.725	175.9	360.4	0.461	0.990	-9.74	1.722	90.1	267.0	-36.8	0.486
		7.13	12.39	19.52	TWO	0.900	341.5	0.0	102.4										
44570.0	44678.0	0.285	350.2	-44.7	-12.25	0.803	91.7	0.364	0.724	182.9	356.9	0.4600	0.987A	19.08	1.721	89.2	274.9	59.5	0.653
		6.13	17.25	23.38	ONE	0.900	341.5	0.0	101.6										
44580.0	44678.0	0.237	331.2	-28.7	-4.60	0.810	96.4	0.368	0.728	191.3	355.2	0.4600	0.996A	11.31	1.723	88.7	273.2	40.5	0.520
		5.30	13.37	18.67	ONE	0.900	341.5	0.0	106.3										
44590.0	44678.0	0.269	321.0	-24.4	-2.88	0.828	102.0	0.380	0.742	201.1	354.9	0.4600	1.024A	9.47	1.731	88.6	272.8	34.6	0.501
		5.84	12.83	18.67	ONE	0.900	341.5	0.0	107.4										
44600.0	44678.0	0.336	315.1	-22.4	-2.14	0.862	108.4	0.406	0.775	212.6	356.2	0.4600	1.089A	8.61	1.747	88.9	270.7	31.4	0.502
		7.10	12.86	19.96	ONE	0.900	341.5	0.0	106.3										
44610.0	44678.0	0.441	313.0	-21.0	-1.75	0.923	115.6	0.456	0.847	225.8	359.2	0.4610	1.233A	8.09	1.778	89.8	266.2	28.9	0.518
		9.35	13.30	22.66	ONE	0.900	341.5	0.0	102.8										
ARRIVAL DATE = 2444680.0																			
44510.0	44680.0	0.336	326.6	-7.8	2.25	0.829	72.7	0.420	0.764	152.2	391.8	0.443	1.086	5.60	1.734	99.3	229.5	20.8	0.470
		7.10	11.94	19.04	TWO	0.930	347.1	0.0	64.3										
44520.0	44680.0	0.307	331.4	-4.7	2.54	0.823	75.3	0.403	0.755	155.7	385.4	0.451	1.059	5.09	1.729	97.2	237.3	19.9	0.447
		6.53	11.26	17.79	TWO	0.930	347.1	0.0	71.4										
44530.0	44680.0	0.281	334.7	-1.2	3.02	0.817	78.0	0.388	0.746	159.7	379.6	0.456	1.036	4.41	1.724	95.4	244.6	17.9	0.429
		6.04	10.74	16.78	TWO	0.930	347.1	0.0	78.1										
44540.0	44680.0	0.258	335.8	2.9	3.88	0.811	80.9	0.377	0.738	164.3	374.2	0.460	1.016	3.37	1.720	93.9	251.2	14.1	0.414
		5.65	10.33	15.98	TWO	0.930	347.1	0.0	84.3										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44550.0	44680.0	0.245	333.4	9.3	5.68	0.807	84.1	0.368	0.731	169.6	369.6	0.462	1.000	1.39	1.716	92.6	256.9	5.9	0.403
		5.44	10.01	15.44	TWO	0.930	347.1	0.0	89.7										
44560.0	44680.0	0.276	324.5	22.6	11.21	0.804	87.6	0.363	0.727	175.8	365.8	0.463	0.990	-4.31	1.714	91.5	261.4	-18.0	0.417
		5.97	10.39	16.36	TWO	0.930	347.1	0.0	94.0										
44580.0	44680.0	0.278	340.6	-43.3	-10.59	0.812	96.3	0.365	0.730	191.2	360.6	0.464	0.996A	17.15	1.716	90.1	269.4	56.6	0.606
		6.00	15.88	21.89	ONE	0.930	347.1	0.0	96.7										
44590.0	44680.0	0.276	324.4	-31.5	-5.49	0.829	101.7	0.376	0.744	201.0	360.3	0.464	1.023A	11.88	1.723	90.1	268.2	43.0	0.520
		5.96	13.36	19.32	ONE	0.930	347.1	0.0	98.1										
44600.0	44680.0	0.335	316.8	-26.2	-3.78	0.862	108.0	0.402	0.775	212.4	361.6	0.464	1.086A	9.98	1.739	90.4	265.9	36.7	0.504
		7.08	12.91	19.99	ONE	0.930	347.1	0.0	97.0										
44610.0	44680.0	0.435	314.1	-23.2	-2.95	0.921	115.1	0.451	0.843	225.4	364.4	0.463	1.223A	8.96	1.768	91.4	261.5	32.4	0.514
		9.22	13.21	22.43	ONE	0.930	347.1	0.0	93.7										
ARRIVAL DATE = 2444682.0																			
44510.0	44682.0	0.345	326.5	-6.6	2.84	0.829	72.1	0.427	0.764	151.9	397.0	0.438	1.090	5.32	1.728	100.9	226.2	18.3	0.501
		7.28	12.81	20.10	TWO	0.959	352.7	0.0	55.7										
44520.0	44682.0	0.314	331.3	-3.3	3.14	0.822	74.8	0.408	0.755	155.3	390.6	0.447	1.062	4.73	1.723	98.7	233.4	17.4	0.469
		6.67	11.88	18.56	TWO	0.959	352.7	0.0	62.2										
44530.0	44682.0	0.287	334.6	0.3	3.62	0.816	77.7	0.392	0.746	159.3	384.7	0.454	1.038	3.97	1.719	96.9	240.3	15.5	0.443
		6.15	11.15	17.30	TWO	0.959	352.7	0.0	68.5										
44540.0	44682.0	0.263	335.8	4.6	4.44	0.811	80.6	0.379	0.738	163.9	379.4	0.458	1.017	2.89	1.714	95.3	246.6	11.8	0.423
		5.74	10.57	16.30	TWO	0.959	352.7	0.0	74.2										
44550.0	44682.0	0.249	333.7	10.3	5.99	0.807	83.8	0.369	0.731	169.2	374.7	0.462	1.001	1.10	1.711	94.0	252.0	4.6	0.407
		5.49	10.13	15.62	TWO	0.959	352.7	0.0	79.4										
44560.0	44682.0	0.262	326.8	19.7	9.65	0.805	87.4	0.363	0.727	175.4	370.9	0.463	0.991	-2.79	1.709	92.9	256.4	-11.8	0.408
		5.71	10.14	15.85	TWO	0.959	352.7	0.0	83.9										
44570.0	44682.0	0.460	313.9	36.3	26.22	0.806	91.5	0.360	0.726	182.6	368.5	0.464	0.987A	-19.59	1.708	92.2	258.2	-62.2	0.647
		9.78	17.07	26.85	TWO	0.959	352.7	0.0	87.9										
44580.0	44682.0	0.488	1.7	-56.6	-27.83	0.813	95.9	0.363	0.730	190.6	365.1	0.465	0.995A	34.24	1.710	91.4	264.1	83.7	0.968
		10.45	26.52	36.97	ONE	0.959	352.7	0.0	90.2										
44590.0	44682.0	0.301	331.3	-41.2	-9.83	0.829	101.4	0.374	0.743	200.5	365.2	0.465	1.021A	16.01	1.717	91.4	262.8	54.1	0.584
		6.43	15.25	21.68	ONE	0.959	352.7	0.0	90.1										
44600.0	44682.0	0.338	319.8	-31.1	-6.03	0.860	107.6	0.399	0.773	211.8	366.4	0.465	1.081A	11.96	1.732	91.8	260.9	42.9	0.528
		7.15	13.59	20.74	ONE	0.959	352.7	0.0	88.7										
44610.0	44682.0	0.430	315.9	-25.8	-4.44	0.916	114.6	0.446	0.837	224.5	369.0	0.464	1.210A	10.13	1.761	92.8	257.0	36.0	0.526
		9.11	13.56	22.67	ONE	0.959	352.7	0.0	85.4										
ARRIVAL DATE = 2444684.0																			
44510.0	44684.0	0.357	326.6	-5.5	3.38	0.828	71.3	0.436	0.763	151.5	402.1	0.430	1.096	5.11	1.725	102.5	224.0	16.1	0.541
		7.53	13.98	21.50	TWO	0.987	358.2	0.0	48.0										
44520.0	44684.0	0.324	331.5	-2.1	3.66	0.822	74.2	0.415	0.754	154.8	395.6	0.441	1.067	4.45	1.720	100.2	230.6	15.2	0.501
		6.86	12.83	19.69	TWO	0.987	358.2	0.0	53.9										
44530.0	44684.0	0.295	334.9	1.5	4.11	0.816	77.1	0.397	0.745	158.7	389.7	0.449	1.041	3.64	1.716	98.3	236.8	13.3	0.469
		6.30	11.89	18.19	TWO	0.987	358.2	0.0	59.6										
44540.0	44684.0	0.270	336.2	5.7	4.87	0.810	80.2	0.383	0.737	163.3	384.3	0.455	1.020	2.56	1.712	96.7	242.7	9.9	0.443
		5.85	11.14	16.99	TWO	0.987	358.2	0.0	64.9										
44550.0	44684.0	0.253	334.5	10.9	6.20	0.806	83.4	0.372	0.731	168.6	379.7	0.459	1.003	0.92	1.708	95.3	247.8	3.7	0.423
		5.57	10.58	16.15	TWO	0.987	358.2	0.0	69.7										
44560.0	44684.0	0.257	328.7	18.3	8.91	0.804	87.0	0.364	0.726	174.8	375.8	0.462	0.991	-2.08	1.706	94.2	252.0	-8.5	0.416
		5.63	10.38	16.01	TWO	0.987	358.2	0.0	74.0										
44570.0	44684.0	0.335	318.2	30.1	16.66	0.805	91.1	0.361	0.725	181.9	373.1	0.463	0.987A	-10.12	1.705	93.5	254.2	-38.1	0.485
		7.07	12.37	19.43	TWO	0.987	358.2	0.0	79.0										
44590.0	44684.0	0.388	346.0	-52.2	-18.55	0.827	100.9	0.373	0.741	199.6	369.5	0.465	1.018A	24.52	1.714	92.6	253.5	69.8	0.757
		8.17	20.31	28.48	ONE	0.987	358.2	0.0	85.0										
44600.0	44684.0	0.352	325.0	-37.6	-9.37	0.857	107.1	0.396	0.769	210.8	370.8	0.464	1.074A	15.05	1.728	93.1	255.5	50.4	0.582
		7.41	15.17	22.58	ONE	0.987	358.2	0.0	82.0										
44610.0	44684.0	0.428	318.5	-29.1	-6.37	0.910	114.0	0.441	0.829	223.3	373.2	0.463	1.194A	11.76	1.755	94.0	252.8	40.1	0.554
		9.05	14.37	23.41	ONE	0.987	358.2	0.0	78.3										
ARRIVAL DATE = 2444686.0																			
44510.0	44686.0	0.372	326.8	-4.7	3.89	0.827	70.4	0.449	0.762	151.1	407.2	0.420	1.104	4.97	1.725	104.2	222.8	14.2	0.590
		7.83	15.42	23.25	TWO	1.016	3.7	0.0	41.2										
44520.0	44686.0	0.337	331.8	-1.3	4.12	0.820	73.4	0.425	0.753	154.3	400.6	0.433	1.072	4.24	1.720	101.8	228.7	13.3	0.543
		7.11	14.05	21.15	TWO	1.016	3.7	0.0	46.5										
44530.0	44686.0	0.305	335.4	2.5	4.53	0.814	76.4	0.405	0.744	158.1	394.6	0.443	1.045	3.39	1.716	99.8	234.4	11.5	0.504
		6.49	12.92	19.41	TWO	1.016	3.7	0.0	51.6										
44540.0	44686.0	0.278	336.9	6.5	5.21	0.809	79.5	0.389	0.736	162.6	389.1	0.450	1.022	2.32	1.712	98.0	239.7	8.3	0.473
		6.00	12.01	18.01	TWO	1.016	3.7	0.0	56.4										
44550.0	44686.0	0.259	335.7	11.3	6.35	0.805	82.9	0.376	0.730	167.9	384.4	0.455	1.004	0.80	1.708	96.6	244.5	3.0	0.449
		5.67	11.31	16.98	TWO	1.016	3.7	0.0	60.9										
44560.0	44686.0	0.256	330.8	17.4	8.46	0.802	86.5	0.368	0.725	173.9	380.5	0.458	0.992	-1.67	1.706	95.5	248.5	-6.5	0.436
		5.62	10.94	16.56	TWO	1.016	3.7	0.0	64.9										
44570.0	44686.0	0.296	321.9	26.0	13.28	0.803	90.6	0.364	0.724	181.0	377.7	0.461	0.987A	-6.84	1.705	94.7	250.8	-26.0	0.461
		6.33	11.67	17.99	TWO	1.016	3.7	0.0	69.5										
44580.0	44686.0	0.543	314.0	37.3	31.87	0.809	95.3	0.366	0.727	189.4	376.5	0.461	0.993A	-25.77	1.707	94.4	239.8	-69.7	0.789
		11.77	21.24	33.01	TWO	1.016	3.7	0.0	78.8										
44600.0	44686.0	0.392	334.5	-45.8	-15.00	0.851	106.5	0.395	0.764	209.4	374.6	0.462	1.066A	20.43	1.726	94.1	248.3	60.4	0.691
		8.26	18.36	26.63	ONE	1.016	3.7	0.0	77.8										
44610.0	44686.0	0.430	322.5	-33.4	-9.06	0.901	113.4	0.438	0.818	221.6	376.9	0.460	1.176A	14.14	1.751	95.1	248.9	45.1	0.602
		9.10	15.76	24.86	ONE	1.016	3.7	0.0	72.8										
ARRIVAL DATE = 2444688.0																			
44510.0	44688.0	0.390	327.0	-4.1	4.37	0.825	69.2	0.464	0.760	150.7	412.3	0.408	1.113	4.88	1.728	106.0	222.4	12.6	0.648
		8.22	17.11	25.32	TWO	1.043	9.2	0.0	35.2										
44520.0	44688.0	0.352	332.2	-0.6	4.55	0.819	72.4	0.437	0.751	153.7	405.6	0.423	1.079	4.09	1.723	103.4	227.8	11.6	0.594
		7.42	15.52	22.93	TWO	1.043	9.2	0.0	40.0										
44530.0	44688.0	0.318	336.0	3.1	4.90	0.813	75.5	0.415	0.742	157.4	399.4	0.434	1.051	3.20	1.718	101.3	233.0	9.9	0.548
		6.74	14.20	20.94	TWO	1.043	9.2	0.0	44.6										
44540.0	44688.0	0.289	338.0	7.1	5.49	0.807	78.7	0.397	0.735	161.8	393.9	0.443	1.026	2.13	1.714	99.4	237.8	7.1	0.511
		6.19	13.12	19.32	TWO	1.043	9.2	0.0	49.0										
44550.0	44688.0	0.267	337.3	11.6	6.46	0.803	82.1	0.383	0.728	166.9	389.0	0.449	1.007	0.71	1.711	97.9	242.2	2.5	0.483
		5.80	12.29	18.10	TWO	1.043	9.2	0.0	53.0										
44560.0	44688.0	0.259	333.1	16.8	8.16	0.800	85.8	0.373	0.723	172.9	385.0	0.453	0.993	-1.41	1.708	96.7	245.9	-5.1	0.465
		5.66	11.77	17.43	TWO	1.043	9.2	0.0	56.8										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44570.0	44688.0	0.280	325.3	23.4	11.54	0.800	89.9	0.368	0.721	179.9	382.0	0.456	0.987	-5.19	1.707	95.9	248.3	-19.0	0.471
		6.03	11.96	17.99	TWO	1.043	9.2	0.0	60.9										
44580.0	44688.0	0.390	316.2	32.4	20.60	0.806	94.6	0.368	0.724	188.0	380.4	0.457	0.991A	-14.65	1.708	95.4	246.5	-47.1	0.587
		8.23	15.33	23.56	TWO	1.043	9.2	0.0	68.4										
44600.0	44688.0	0.515	352.3	-53.2	-26.46	0.845	105.7	0.394	0.757	207.6	377.8	0.459	1.056A	31.64	1.726	95.0	226.3	74.1	0.938
		11.10	25.65	36.75	ONE	1.043	9.2	0.0	77.4										
44610.0	44688.0	0.446	328.8	-39.1	-13.12	0.891	112.6	0.434	0.807	219.6	380.2	0.456	1.157A	17.91	1.749	96.1	244.5	51.8	0.681
		9.47	18.07	27.54	ONE	1.043	9.2	0.0	69.4										
ARRIVAL DATE = 2444690.0																			
44510.0	44690.0	0.412	327.3	-3.6	4.85	0.823	67.7	0.482	0.758	150.4	417.5	0.393	1.124	4.83	1.733	107.9	222.7	11.2	0.714
		8.69	19.05	27.74	TWO	1.070	14.8	0.0	29.9										
44520.0	44690.0	0.370	332.8	-0.1	4.96	0.817	71.1	0.452	0.749	153.2	410.6	0.410	1.088	3.98	1.728	105.2	227.7	10.2	0.652
		7.80	17.23	25.02	TWO	1.070	14.8	0.0	34.2										
44530.0	44690.0	0.333	336.9	3.6	5.24	0.810	74.4	0.428	0.740	156.7	404.2	0.423	1.057	3.06	1.724	102.9	232.4	8.6	0.600
		7.04	15.71	22.76	TWO	1.070	14.8	0.0	38.4										
44540.0	44690.0	0.302	339.2	7.5	5.73	0.805	77.7	0.408	0.732	160.9	398.5	0.434	1.031	1.99	1.720	100.9	236.9	6.0	0.558
		6.43	14.47	20.90	TWO	1.070	14.8	0.0	42.4										
44550.0	44690.0	0.277	339.1	11.8	6.55	0.800	81.2	0.392	0.726	165.9	393.6	0.441	1.010	0.64	1.716	99.3	240.9	2.1	0.524
		5.98	13.49	19.47	TWO	1.070	14.8	0.0	46.1										
44560.0	44690.0	0.263	335.7	16.4	7.93	0.797	85.0	0.381	0.721	171.7	389.4	0.446	0.995	-1.22	1.713	98.0	244.3	-4.1	0.501
		5.74	12.83	18.57	TWO	1.070	14.8	0.0	49.6										
44570.0	44690.0	0.272	328.8	21.7	10.45	0.797	89.1	0.374	0.718	178.5	386.3	0.450	0.987	-4.21	1.712	97.1	246.7	-14.5	0.497
		5.90	12.70	18.60	TWO	1.070	14.8	0.0	53.3										
44580.0	44690.0	0.334	320.0	28.3	16.00	0.801	93.8	0.373	0.720	186.5	384.3	0.452	0.989A	-10.20	1.713	96.5	246.7	-33.5	0.547
		7.05	14.15	21.20	TWO	1.070	14.8	0.0	59.0										
44590.0	44690.0	0.593	316.3	36.9	34.75	0.813	99.2	0.381	0.729	195.7	384.2	0.451	1.007A	-29.38	1.718	96.6	225.8	-68.4	0.900
		13.03	24.54	37.57	TWO	1.070	14.8	0.0	71.6										
44610.0	44690.0	0.497	339.9	-46.0	-20.12	0.880	111.7	0.431	0.794	217.3	383.1	0.452	1.136A	24.62	1.750	96.9	236.4	61.3	0.825
		10.67	22.33	32.99	ONE	1.070	14.8	0.0	68.9										
ARRIVAL DATE = 2444692.0																			
44510.0	44692.0	0.437	327.6	-3.3	5.32	0.821	66.0	0.504	0.757	150.1	422.9	0.375	1.138	4.83	1.742	110.0	223.5	10.1	0.789
		9.26	21.25	30.51	TWO	1.096	20.5	0.0	25.1										
44520.0	44692.0	0.392	333.4	0.2	5.35	0.814	69.6	0.471	0.747	152.6	415.7	0.395	1.099	3.92	1.737	107.1	228.2	9.1	0.719
		8.26	19.18	27.44	TWO	1.096	20.5	0.0	29.1										
44530.0	44692.0	0.352	337.8	3.9	5.55	0.808	73.1	0.444	0.738	155.9	409.1	0.410	1.065	2.95	1.732	104.6	232.6	7.5	0.660
		7.42	17.45	24.87	TWO	1.096	20.5	0.0	33.0										
44540.0	44692.0	0.317	340.6	7.8	5.95	0.802	76.6	0.421	0.730	160.0	403.2	0.422	1.037	1.88	1.728	102.4	236.8	5.2	0.611
		6.73	16.03	22.75	TWO	1.096	20.5	0.0	36.6										
44550.0	44692.0	0.289	341.1	11.8	6.63	0.797	80.1	0.404	0.723	164.8	398.1	0.431	1.015	0.59	1.724	100.7	240.5	1.8	0.572
		6.19	14.90	21.09	TWO	1.096	20.5	0.0	40.1										
44560.0	44692.0	0.271	338.6	16.0	7.76	0.793	84.0	0.390	0.717	170.4	393.8	0.437	0.998	-1.09	1.721	99.3	243.7	-3.4	0.544
		5.87	14.08	19.95	TWO	1.096	20.5	0.0	43.3										
44570.0	44692.0	0.271	332.6	20.5	9.70	0.792	88.2	0.382	0.715	177.0	390.4	0.442	0.988	-3.56	1.719	98.3	246.0	-11.5	0.532
		5.87	13.72	19.59	TWO	1.096	20.5	0.0	46.7										
44580.0	44692.0	0.307	324.2	25.4	13.49	0.796	92.9	0.379	0.716	184.7	388.1	0.444	0.987A	-7.84	1.720	97.6	246.8	-24.9	0.553
		6.52	14.33	20.86	TWO	1.096	20.5	0.0	51.2										
44590.0	44692.0	0.434	317.2	32.2	23.00	0.806	98.2	0.385	0.723	193.6	387.3	0.445	1.001A	-17.84	1.724	97.5	241.7	-48.9	0.695
		9.20	18.48	27.68	TWO	1.096	20.5	0.0	60.4										
ARRIVAL DATE = 2444694.0																			
44510.0	44694.0	0.467	327.9	-3.2	5.81	0.819	63.9	0.529	0.754	149.9	428.5	0.355	1.154	4.88	1.753	112.4	224.8	9.1	0.874
		9.95	23.75	33.70	TWO	1.122	26.2	0.0	20.7										
44520.0	44694.0	0.418	334.0	0.4	5.75	0.812	67.8	0.493	0.745	152.2	420.9	0.377	1.112	3.89	1.748	109.2	229.3	8.1	0.794
		8.82	21.40	30.22	TWO	1.122	26.2	0.0	24.4										
44530.0	44694.0	0.374	338.9	4.1	5.85	0.805	71.5	0.463	0.735	155.2	414.1	0.395	1.076	2.88	1.743	106.4	233.5	6.6	0.727
		7.87	19.43	27.30	TWO	1.122	26.2	0.0	28.0										
44540.0	44694.0	0.336	342.1	7.9	6.16	0.798	75.1	0.438	0.727	159.0	408.0	0.409	1.045	1.80	1.739	104.1	237.3	4.5	0.672
		7.09	17.80	24.89	TWO	1.122	26.2	0.0	31.4										
44550.0	44694.0	0.304	343.3	11.8	6.70	0.793	78.9	0.417	0.720	163.6	402.6	0.419	1.020	0.55	1.735	102.2	240.8	1.5	0.627
		6.47	16.50	22.96	TWO	1.122	26.2	0.0	34.7										
44560.0	44694.0	0.281	341.6	15.7	7.61	0.789	82.8	0.402	0.714	169.0	398.1	0.427	1.001	-0.99	1.732	100.7	243.8	-2.8	0.594
		6.05	15.52	21.57	TWO	1.122	26.2	0.0	37.7										
44570.0	44694.0	0.273	336.5	19.6	9.14	0.787	87.0	0.392	0.710	175.4	394.4	0.432	0.989	-3.10	1.730	99.5	246.1	-9.3	0.575
		5.91	14.96	20.87	TWO	1.122	26.2	0.0	40.8										
44580.0	44694.0	0.293	328.7	23.5	11.88	0.789	91.8	0.387	0.711	182.8	391.9	0.435	0.986A	-6.40	1.730	98.8	247.3	-19.2	0.579
		6.26	15.10	21.37	TWO	1.122	26.2	0.0	44.6										
44590.0	44694.0	0.367	320.8	28.1	17.66	0.798	97.1	0.391	0.717	191.4	390.7	0.437	0.996A	-12.72	1.733	98.5	245.6	-35.8	0.646
		7.74	17.04	24.78	TWO	1.122	26.2	0.0	51.2										
ARRIVAL DATE = 2444696.0																			
44510.0	44696.0	0.502	328.2	-3.3	6.33	0.816	61.5	0.560	0.752	150.0	434.4	0.331	1.173	4.98	1.768	115.1	226.5	8.2	0.969
		10.78	26.57	37.35	TWO	1.147	32.1	0.0	16.6										
44520.0	44696.0	0.448	334.7	0.4	6.15	0.809	65.7	0.519	0.742	151.8	426.4	0.357	1.127	3.90	1.763	111.5	230.8	7.3	0.879
		9.50	23.89	33.40	TWO	1.147	32.1	0.0	20.1										
44530.0	44696.0	0.400	339.9	4.1	6.15	0.801	69.6	0.485	0.733	154.5	419.3	0.377	1.088	2.84	1.758	108.5	234.8	5.9	0.803
		8.42	21.66	30.08	TWO	1.147	32.1	0.0	23.5										
44540.0	44696.0	0.357	343.7	7.8	6.35	0.795	73.5	0.457	0.724	158.0	412.9	0.393	1.054	1.74	1.753	105.9	238.5	4.0	0.740
		7.53	19.80	27.33	TWO	1.147	32.1	0.0	26.7										
44550.0	44696.0	0.321	345.5	11.6	6.77	0.789	77.3	0.434	0.716	162.3	407.2	0.405	1.027	0.52	1.749	103.8	241.9	1.3	0.688
		6.81	18.29	25.10	TWO	1.147	32.1	0.0	29.8										
44560.0	44696.0	0.294	344.7	15.4	7.49	0.784	81.4	0.416	0.710	167.5	402.4	0.414	1.005	-0.91	1.745	102.1	244.7	-2.4	0.649
		6.28	17.14	23.42	TWO	1.147	32.1	0.0	32.7										
44570.0	44696.0	0.279	340.7	18.9	8.69	0.781	85.7	0.404	0.706	173.6	398.5	0.421	0.991	-2.77	1.743	100.8	247.0	-7.6	0.624
		6.01	16.39	22.41	TWO	1.147	32.1	0.0	35.6										
44580.0	44696.0	0.286	333.6	22.1	10.73	0.782	90.5	0.397	0.705	180.7	395.7	0.425	0.985A	-5.43	1.743	99.9	248.4	-15.3	0.617
		6.15	16.21	22.36	TWO	1.147	32.1	0.0	39.0										
44590.0	44696.0	0.333	325.4	25.2	14.61	0.789	95.9	0.398	0.710	189.0	394.0	0.427	0.992A	-9.89	1.745	99.5	248.0	-27.1	0.649
		7.03	17.14	24.17	TWO	1.147	32.1	0.0	43.9										
44600.0	44696.0	0.464	320.2	30.4	23.73	0.806	102.0	0.410	0.723	198.5	393.9	0.427	1.019A	-19.57	1.753	99.7	241.9	-46.6	0.796
		9.87	21.45	31.32	TWO	1.147	32.1	0.0	53.4										

1980
EARTH-MERCURY

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2444698.0											
44510.0	44698.0	0.544	328.3	-3.5	6.88	0.814	58.6	0.594	0.750	150.2	440.7	0.304	1.196	5.15	1.786	118.1	228.4	7.5	1.077
		11.78	29.77	41.56	TWO	1.171	38.1	0.0	12.8										
44520.0	44698.0	0.483	335.2	0.2	6.56	0.806	63.2	0.549	0.739	151.6	432.3	0.333	1.146	3.95	1.780	114.1	232.7	6.6	0.974
		10.32	26.72	37.04	TWO	1.171	38.1	0.0	16.0										
44530.0	44698.0	0.430	340.9	3.9	6.45	0.798	67.4	0.511	0.730	153.9	424.7	0.357	1.102	2.83	1.775	110.8	236.7	5.3	0.888
		9.09	24.17	33.26	TWO	1.171	38.1	0.0	19.2										
44540.0	44698.0	0.383	345.3	7.7	6.53	0.790	71.5	0.480	0.720	157.1	418.0	0.375	1.066	1.70	1.770	108.0	240.2	3.5	0.816
		8.07	22.04	30.11	TWO	1.171	38.1	0.0	22.4										
44550.0	44698.0	0.343	347.8	11.4	6.82	0.784	75.5	0.454	0.712	161.1	412.0	0.389	1.036	0.50	1.766	105.6	243.5	1.1	0.757
		7.23	20.31	27.54	TWO	1.171	38.1	0.0	25.4										
44560.0	44698.0	0.310	348.0	15.0	7.38	0.778	79.7	0.433	0.706	165.9	406.9	0.400	1.011	-0.86	1.762	103.7	246.2	-2.1	0.711
		6.59	18.96	25.54	TWO	1.171	38.1	0.0	28.2										
44570.0	44698.0	0.289	345.0	18.3	8.31	0.775	84.1	0.418	0.701	171.7	402.7	0.408	0.994	-2.52	1.759	102.3	248.5	-6.4	0.679
		6.19	18.01	24.19	TWO	1.171	38.1	0.0	31.0										
44580.0	44698.0	0.286	338.7	21.1	9.86	0.774	89.0	0.409	0.699	178.6	399.5	0.413	0.985	-4.74	1.758	101.2	250.0	-12.4	0.663
		6.13	17.56	23.70	TWO	1.171	38.1	0.0	34.0										
44590.0	44698.0	0.313	330.7	23.3	12.60	0.780	94.4	0.408	0.702	186.5	397.5	0.416	0.988A	-8.11	1.760	100.6	250.3	-21.2	0.676
		6.65	17.92	24.57	TWO	1.171	38.1	0.0	37.9										
44600.0	44698.0	0.394	323.9	26.3	18.13	0.794	100.6	0.416	0.713	195.7	396.8	0.416	1.009A	-14.24	1.766	100.6	248.0	-34.8	0.748
		8.30	20.06	28.36	TWO	1.171	38.1	0.0	44.6										
								ARRIVAL DATE = 2444700.0											
44510.0	44700.0	0.592	328.3	-3.8	7.51	0.811	55.3	0.635	0.748	150.9	447.5	0.273	1.222	5.40	1.807	121.7	230.6	6.9	1.201
		12.98	33.42	46.40	TWO	1.194	44.4	0.0	9.3										
44520.0	44700.0	0.524	335.7	-0.1	7.01	0.803	60.3	0.585	0.737	151.7	438.6	0.306	1.167	4.06	1.801	117.2	234.9	6.0	1.083
		11.31	29.93	41.24	TWO	1.194	44.4	0.0	12.1										
44530.0	44700.0	0.465	341.9	3.7	6.76	0.794	64.9	0.542	0.726	153.5	430.6	0.333	1.120	2.85	1.796	113.4	238.8	4.8	0.984
		9.90	27.01	36.91	TWO	1.194	44.4	0.0	15.2										
44540.0	44700.0	0.413	346.8	7.4	6.72	0.786	69.2	0.506	0.717	156.3	423.4	0.354	1.080	1.68	1.791	110.3	242.4	3.1	0.902
		8.72	24.57	33.30	TWO	1.194	44.4	0.0	18.3										
44550.0	44700.0	0.368	350.1	11.0	6.88	0.779	73.5	0.477	0.708	159.9	417.1	0.370	1.046	0.49	1.786	107.6	245.5	1.0	0.834
		7.75	22.57	30.32	TWO	1.194	44.4	0.0	21.2										
44560.0	44700.0	0.330	351.2	14.6	7.28	0.772	77.8	0.453	0.701	164.4	411.6	0.383	1.019	-0.81	1.782	105.5	248.3	-1.8	0.780
		6.98	20.98	27.96	TWO	1.194	44.4	0.0	24.0										
44570.0	44700.0	0.302	349.3	17.7	7.99	0.768	82.4	0.436	0.696	169.9	407.1	0.393	0.999	-2.33	1.779	103.8	250.5	-5.4	0.740
		6.44	19.81	26.25	TWO	1.194	44.4	0.0	26.7										
44580.0	44700.0	0.290	344.1	20.3	9.16	0.766	87.3	0.424	0.693	176.3	403.5	0.399	0.987	-4.24	1.777	102.6	252.2	-10.3	0.717
		6.21	19.12	25.33	TWO	1.194	44.4	0.0	29.5										
44590.0	44700.0	0.303	336.4	22.0	11.14	0.770	92.8	0.420	0.694	183.9	401.1	0.403	0.986A	-6.90	1.778	101.8	252.9	-17.0	0.715
		6.45	19.08	25.53	TWO	1.194	44.4	0.0	32.8										
44600.0	44700.0	0.355	328.9	23.5	14.78	0.781	99.0	0.424	0.703	192.7	399.9	0.404	1.001A	-11.18	1.783	101.6	252.1	-26.7	0.752
		7.49	20.18	27.67	TWO	1.194	44.4	0.0	37.8										
44610.0	44700.0	0.481	324.7	27.2	22.75	0.807	106.0	0.443	0.723	202.6	400.2	0.403	1.043A	-19.78	1.794	102.0	246.6	-42.0	0.888
		10.27	24.16	34.43	TWO	1.194	44.4	0.0	46.5										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2445004.0											
44860.0	45004.0	0.527	303.3	1.6	16.00	0.764	63.4	0.581	0.712	156.1	310.0	0.298D	1.126	-13.68	2.102	72.1	237.2	-25.9	1.083
		11.37	29.93	41.31	ONE	0.654	247.2	0.0	152.3										
44870.0	45004.0	0.496	311.3	-1.0	12.03	0.742	64.8	0.588	0.693	158.7	303.2	0.286D	1.101	-9.07	2.093	69.6	238.3	-16.3	1.099
		10.62	30.41	41.03	ONE	0.654	247.2	0.0	161.4										
44880.0	45004.0	0.477	318.0	-1.9	9.84	0.718	66.5	0.597	0.674	161.5	296.3	0.272D	1.077	-6.20	2.084	67.1	240.4	-10.4	1.150
		10.18	31.91	42.09	ONE	0.654	247.2	0.0	167.6										
44890.0	45004.0	0.463	323.5	-1.9	8.52	0.692	68.6	0.608	0.655	164.5	289.6	0.257D	1.054	-4.15	2.073	64.6	242.8	-6.4	1.213
		9.85	33.79	43.65	ONE	0.654	247.2	0.0	172.2										
44900.0	45004.0	0.452	327.7	-1.6	7.70	0.663	71.5	0.621	0.637	167.8	283.0	0.241D	1.032	-2.53	2.062	62.0	245.1	-3.6	1.282
		9.60	35.82	45.42	ONE	0.654	247.2	0.0	175.8										
44910.0	45004.0	0.444	330.6	-1.4	7.22	0.632	75.4	0.636	0.619	171.3	276.6	0.225D	1.012	-1.15	2.051	59.5	247.5	-1.5	1.353
		9.41	37.93	47.33	ONE	0.654	247.2	0.0	178.5										
44920.0	45004.0	0.440	331.7	-1.5	6.99	0.601	80.9	0.654	0.603	175.1	270.5	0.209D	0.997	0.10	2.041	57.0	249.7	0.1	1.425
		9.34	40.07	49.41	ONE	0.654	247.2	0.0	177.5										
44930.0	45004.0	0.448	330.7	-2.4	6.99	0.575	88.8	0.674	0.590	179.4	264.8	0.193D	0.988	1.33	2.032	54.4	251.8	1.5	1.498
		9.51	42.25	51.76	ONE	0.654	247.2	0.0	175.2										
44940.0	45004.0	0.476	327.5	-4.2	7.20	0.564	99.9	0.697	0.585	184.4	259.7	0.177D	0.993A	2.60	2.028	51.9	253.8	2.6	1.574
		10.15	44.51	54.66	ONE	0.654	247.2	0.0	173.0										
44950.0	45004.0	0.542	322.6	-6.7	7.67	0.592	114.4	0.726	0.595	190.3	255.6	0.163D	1.027A	3.99	2.035	49.3	255.3	3.7	1.657
		11.75	46.97	58.72	ONE	0.654	247.2	0.0	171.1										
								ARRIVAL DATE = 2445006.0											
44860.0	45006.0	0.566	298.7	10.3	24.12	0.774	65.4	0.551	0.720	155.5	318.8	0.323D	1.118	-21.27	2.063	75.6	247.4	-40.3	1.120
		12.34	31.03	43.37	ONE	0.662	257.1	0.0	138.7										
44870.0	45006.0	0.488	309.0	4.6	15.58	0.755	67.0	0.554	0.703	158.2	312.3	0.313D	1.093	-12.13	2.054	73.4	244.4	-23.8	1.027
		10.45	28.27	38.72	ONE	0.662	257.1	0.0	153.2										
44880.0	45006.0	0.454	316.4	2.0	11.67	0.735	68.9	0.560	0.685	161.1	305.7	0.301D	1.069	-7.60	2.045	71.1	245.7	-14.2	1.044
		9.64	28.79	38.42	ONE	0.662	257.1	0.0	161.9										
44890.0	45006.0	0.432	322.2	0.9	9.52	0.712	71.3	0.568	0.668	164.3	299.2	0.289D	1.047	-4.80	2.036	68.8	247.9	-8.4	1.092
		9.14	30.20	39.33	ONE	0.662	257.1	0.0	167.6										
44900.0	45006.0	0.415	326.4	0.5	8.23	0.688	74.2	0.577	0.651	167.7	292.8	0.275D	1.026	-2.80	2.026	66.5	250.2	-4.5	1.149
		8.77	31.90	40.67	ONE	0.662	257.1	0.0	171.7										
44910.0	45006.0	0.403	329.0	0.2	7.44	0.663	78.2	0.589	0.634	171.5	286.7	0.261D	1.008	-1.23	2.016	64.2	252.5	-1.8	1.210
		8.50	33.71	42.22	ONE	0.662	257.1	0.0	175.0										
44920.0	45006.0	0.397	329.5	-0.5	6.97	0.639	83.5	0.603	0.620	175.7	280.9	0.246D	0.994	0.11	2.007	62.0	254.6	0.2	1.272
		8.37	35.55	43.92	ONE	0.662	257.1	0.0	177.5										
44930.0	45006.0	0.402	327.8	-1.9	6.76	0.621	90.7	0.619	0.610	180.4	275.7	0.232D	0.988A	1.33	2.001	59.9	256.6	1.7	1.334
		8.49	37.39	45.87	ONE	0.662	257.1	0.0	178.2										
44940.0	45006.0	0.429	323.9	-4.2	6.75	0.618	100.5	0.639	0.608	186.1	271.2	0.219D	0.996A	2.52	1.999	57.8	258.3	3.1	1.397
		9.08	39.25	48.33	ONE	0.662	257.1	0.0	176.7										
44950.0	45006.0	0.494	318.5	-7.2	6.96	0.650	113.0	0.665	0.621	193.0	268.1	0.208D	1.035A	3.75	2.008	55.8	259.5	4.3	1.463
		10.59	41.22	51.81	ONE	0.662	257.1	0.0	175.1										
								ARRIVAL DATE = 2445008.0											
44870.0	45008.0	0.520	304.4	12.6	22.25	0.767	68.9	0.525	0.712	157.8	320.9	0.338D	1.086	-18.36	2.015	76.8	252.5	-36.9	1.029
		11.21	28.33	39.54	ONE	0.677	266.4	0.0	140.9										
44880.0	45008.0	0.444	314.0	7.0	14.42	0.749	71.0	0.528	0.695	160.9	314.6	0.328D	1.062	-9.98	2.007	74.7	250.8	-20.4	0.961
		9.42	26.32	35.74	ONE	0.677	266.4	0.0	154.5										
44890.0	45008.0	0.408	320.3	4.3	10.83	0.729	73.5	0.532	0.679	164.2	308.3	0.318D	1.041	-5.80	1.998	72.6	252.4	-11.3	0.983
		8.62	26.98	35.60	ONE	0.677	266.4	0.0	162.1										
44900.0	45008.0	0.385	324.7	2.9	8.86	0.709	76.6	0.539	0.664	167.9	302.2	0.306D	1.021	-3.21	1.989	70.5	254.6	-5.9	1.028
		8.12	28.31	36.43	ONE	0.677	266.4	0.0	166.9										
44910.0	45008.0	0.369	326.9	1.8	7.68	0.689	80.5	0.547	0.649	171.9	296.4	0.294D	1.004	-1.35	1.981	68.5	256.8	-2.3	1.079
		7.78	29.83	37.61	ONE	0.677	266.4	0.0	170.2										
44920.0	45008.0	0.361	327.0	0.5	6.96	0.671	85.6	0.557	0.637	176.5	291.0	0.282D	0.992	0.11	1.974	66.5	258.9	0.2	1.132
		7.60	31.39	38.99	ONE	0.677	266.4	0.0	172.5										
44930.0	45008.0	0.365	324.5	-1.6	6.54	0.660	92.4	0.571	0.629	181.8	286.3	0.270D	0.988A	1.37	1.969	64.7	260.7	2.1	1.184
		7.69	32.93	40.62	ONE	0.677	266.4	0.0	174.0										
44940.0	45008.0	0.392	319.8	-4.5	6.35	0.664	101.2	0.587	0.630	188.1	282.6	0.260D	1.000A	2.52	1.969	63.1	262.2	3.6	1.235
		8.27	34.44	42.71	ONE	0.677	266.4	0.0	174.5										
44950.0	45008.0	0.459	314.2	-7.9	6.36	0.699	112.3	0.611	0.648	196.0	280.4	0.252D	1.045A	3.64	1.981	61.6	263.0	4.9	1.287
		9.75	35.99	45.75	ONE	0.677	266.4	0.0	174.1										
44960.0	45008.0	0.586	305.2	-11.0	6.58	0.793	124.8	0.651	0.712	206.4	280.6	0.248D	1.175A	4.81	2.015	60.3	263.0	6.2	1.347
		12.85	37.76	50.61	ONE	0.677	266.4	0.0	172.9										
								ARRIVAL DATE = 2445010.0											
44880.0	45010.0	0.464	309.8	14.0	19.34	0.761	72.7	0.500	0.704	160.8	323.1	0.352D	1.056	-14.55	1.969	77.9	256.5	-31.5	0.927
		9.87	25.31	35.18	ONE	0.698	275.1	0.0	144.0										
44890.0	45010.0	0.396	317.8	8.6	12.74	0.744	75.4	0.501	0.689	164.4	317.1	0.344D	1.035	-7.43	1.961	76.0	256.4	-16.0	0.891
		8.35	24.27	32.62	ONE	0.698	275.1	0.0	155.6										
44900.0	45010.0	0.363	322.5	5.6	9.66	0.728	78.5	0.505	0.675	168.2	311.2	0.334D	1.016	-3.81	1.954	74.1	258.3	-7.8	0.919
		7.64	25.08	32.71	ONE	0.698	275.1	0.0	161.6										
44910.0	45010.0	0.342	324.6	3.5	7.96	0.712	82.4	0.510	0.663	172.6	305.7	0.324D	1.001	-1.53	1.946	72.3	260.5	-2.9	0.960
		7.21	26.30	33.51	ONE	0.698	275.1	0.0	165.2										
44920.0	45010.0	0.331	324.0	1.3	6.93	0.699	87.4	0.518	0.653	177.6	300.8	0.315D	0.991	0.12	1.940	70.6	262.5	0.2	1.004
		7.00	27.61	34.61	ONE	0.698	275.1	0.0	167.5										
44930.0	45010.0	0.335	320.8	-1.5	6.31	0.693	93.8	0.528	0.648	183.4	296.6	0.305D	0.990A	1.44	1.937	69.1	264.2	2.5	1.048
		7.08	28.88	35.97	ONE	0.698	275.1	0.0	168.9										
44940.0	45010.0	0.364	315.6	-5.1	5.96	0.703	101.9	0.543	0.652	190.5	293.6	0.298D	1.005A	2.58	1.940	67.8	265.5	4.3	1.089
		7.67	30.11	37.78	ONE	0.698	275.1	0.0	169.5										
44950.0	45010.0	0.433	309.9	-8.8	5.81	0.741	111.9	0.566	0.675	199.3	292.3	0.293D	1.057A	3.63	1.953	66.7	266.0	5.8	1.129
		9.16	31.31	40.47	ONE	0.698	275.1	0.0	169.2										
44960.0	45010.0	0.560	305.4	-12.0	5.85	0.833	123.2	0.608	0.747	210.9	293.8	0.292D	1.201A	4.66	1.989	65.9	265.3	7.2	1.174
		12.19	32.64	44.83	ONE	0.698	275.1	0.0	167.9										
								ARRIVAL DATE = 2445012.0											
44860.0	45012.0	0.535	317.3	-55.6	-25.56	0.798	70.2	0.479	0.740	154.8	346.9	0.386D	1.094	29.78	1.947	85.8	269.0	63.2	1.081
		11.58	29.87	41.45	TWO	0.724	283.2	0.0	115.9										
44880.0	45012.0	0.576	301.9	22.7	31.13	0.771	74.2	0.476	0.712	160.9	330.8	0.373D	1.051	-26.02	1.933	80.7	270.1	-51.8	1.065
		12.58	29.40	41.98	ONE	0.724	283.2	0.0	127.1										
44890.0	45012.0	0.403	314.2	14.3	15.95	0.757	76.9	0.475	0.699	164.6	325.4	0.367D	1.030	-10.38	1.926	79.0	260.2	-24.3	0.828
		8.50	22.41	30.91	ONE	0.724	283.2	0.0	147.0										
44900.0	45012.0	0.348	319.9	8.8	10.79	0.743	80.1	0.476	0.686	168.8	319.9	0.360D	1.012	-4.75	1.919	77.3	261.4	-10.9	0.823
		7.33	22.24	29.57	ONE	0.724	283.2	0.0	155.7										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44910.0	45012.0	0.320	322.0	5.3	8.31	0.731	84.0	0.479	0.675	173.4	314.7	0.352D	0.998	-1.78	1.913	75.7	263.4	-3.9	0.853
		6.78	23.13	29.91	ONE	0.724	283.2	0.0	159.9										
44920.0	45012.0	0.307	321.0	2.0	6.91	0.722	88.9	0.484	0.667	178.8	310.2	0.344D	0.990	0.14	1.908	74.3	265.4	0.3	0.889
		6.54	24.20	30.74	ONE	0.724	283.2	0.0	162.2										
44930.0	45012.0	0.312	317.1	-1.7	6.07	0.721	95.0	0.493	0.664	185.2	306.5	0.337D	0.992A	1.55	1.907	73.0	267.0	3.1	0.925
		6.63	25.26	31.88	ONE	0.724	283.2	0.0	163.5										
44940.0	45012.0	0.344	311.4	-5.9	5.56	0.735	102.6	0.506	0.672	192.9	304.2	0.332D	1.012A	2.69	1.911	72.0	268.0	5.1	0.958
		7.25	26.24	33.48	ONE	0.724	283.2	0.0	164.0										
44950.0	45012.0	0.415	305.8	-9.9	5.28	0.776	111.7	0.529	0.700	202.7	303.8	0.329D	1.070A	3.69	1.927	71.2	268.1	6.8	0.989
		8.76	27.16	35.92	ONE	0.724	283.2	0.0	163.5										
44960.0	45012.0	0.542	301.9	-13.0	5.18	0.866	122.1	0.575	0.780	215.3	306.3	0.331D	1.228A	4.62	1.964	70.9	266.9	8.4	1.023
		11.75	28.16	39.91	ONE	0.724	283.2	0.0	161.7										
							ARRIVAL DATE = 2445014.0												
44860.0	45014.0	0.418	317.4	-43.4	-13.85	0.803	71.1	0.464	0.745	154.6	353.8	0.399D	1.090	18.48	1.912	88.0	253.6	51.6	0.772
		8.82	20.76	29.58	TWO	0.753	290.9	0.0	119.6										
44870.0	45014.0	0.530	326.0	-57.2	-27.03	0.791	73.3	0.457	0.732	157.8	347.8	0.397D	1.066	32.05	1.906	86.2	279.5	65.9	1.106
		11.45	30.60	42.06	TWO	0.753	290.9	0.0	113.6										
44890.0	45014.0	0.459	308.4	22.1	22.80	0.767	78.2	0.453	0.706	164.9	333.2	0.387D	1.026	-17.01	1.893	81.7	266.3	-40.3	0.847
		9.76	22.97	32.73	ONE	0.753	290.9	0.0	133.9										
44900.0	45014.0	0.344	316.8	13.0	12.55	0.756	81.5	0.451	0.695	169.3	328.2	0.381D	1.009	-6.36	1.887	80.2	263.7	-16.1	0.743
		7.26	19.91	27.17	ONE	0.753	290.9	0.0	148.7										
44910.0	45014.0	0.304	319.3	7.2	8.77	0.747	85.4	0.453	0.686	174.4	323.4	0.375D	0.996	-2.16	1.882	78.8	265.6	-5.3	0.757
		6.48	20.31	26.79	ONE	0.753	290.9	0.0	154.1										
44920.0	45014.0	0.288	317.9	2.6	6.88	0.741	90.1	0.456	0.680	180.2	319.2	0.370D	0.990A	0.16	1.878	77.5	267.5	0.4	0.786
		6.19	21.17	27.35	ONE	0.753	290.9	0.0	156.6										
44930.0	45014.0	0.294	313.5	-2.1	5.80	0.744	96.0	0.463	0.679	187.1	316.1	0.365D	0.994A	1.71	1.878	76.5	269.1	3.8	0.816
		6.29	22.04	28.32	ONE	0.753	290.9	0.0	157.8										
44940.0	45014.0	0.328	307.6	-6.9	5.15	0.761	103.2	0.476	0.690	195.4	314.4	0.361D	1.018A	2.87	1.884	75.7	269.8	6.2	0.842
		6.94	22.82	29.77	ONE	0.753	290.9	0.0	158.0										
44950.0	45014.0	0.402	302.3	-11.1	4.76	0.804	111.7	0.501	0.722	205.9	314.8	0.361D	1.084A	3.83	1.901	75.3	269.5	8.1	0.866
		8.49	23.53	32.02	ONE	0.753	290.9	0.0	157.2										
44960.0	45014.0	0.530	295.1	-14.1	4.56	0.893	121.3	0.551	0.809	219.2	317.9	0.363D	1.255A	4.68	1.940	75.3	267.6	9.9	0.893
		11.45	24.30	35.75	ONE	0.753	290.9	0.0	154.8										
							ARRIVAL DATE = 2445016.0												
44860.0	45016.0	0.374	316.0	-35.5	-8.61	0.807	71.9	0.451	0.749	154.5	360.7	0.411	1.087	13.63	1.880	90.2	248.3	44.5	0.632
		7.87	16.63	24.50	TWO	0.784	298.2	0.0	117.3										
44870.0	45016.0	0.386	324.7	-43.1	-13.37	0.797	74.1	0.443	0.736	157.8	354.4	0.410D	1.063	18.73	1.874	88.3	258.8	52.7	0.756
		8.13	20.29	28.42	TWO	0.784	298.2	0.0	117.9										
44880.0	45016.0	0.557	333.1	-60.0	-30.88	0.786	76.7	0.436	0.725	161.5	348.9	0.408D	1.041	36.57	1.868	86.6	296.1	69.9	1.183
		12.12	32.91	45.03	TWO	0.784	298.2	0.0	110.1										
44900.0	45016.0	0.363	312.7	18.9	15.89	0.767	82.6	0.431	0.703	170.0	336.0	0.400D	1.007	-9.55	1.857	82.8	266.0	-26.0	0.697
		7.64	18.53	26.17	ONE	0.784	298.2	0.0	139.4										
44910.0	45016.0	0.294	316.5	9.6	9.45	0.760	86.5	0.431	0.695	175.3	331.6	0.396D	0.995	-2.77	1.853	81.5	266.9	-7.6	0.673
		6.30	17.85	24.15	ONE	0.784	298.2	0.0	147.8										
44920.0	45016.0	0.274	315.0	3.0	6.85	0.757	91.1	0.433	0.691	181.5	327.8	0.392D	0.990A	0.19	1.850	80.4	268.8	0.5	0.695
		5.92	18.49	24.41	ONE	0.784	298.2	0.0	150.6										
44930.0	45016.0	0.280	310.2	-2.8	5.49	0.762	96.8	0.439	0.693	188.9	325.2	0.388D	0.997A	1.92	1.851	79.6	270.2	4.9	0.720
		6.04	19.21	25.25	ONE	0.784	298.2	0.0	151.6										
44940.0	45016.0	0.317	304.2	-8.1	4.70	0.782	103.7	0.453	0.706	197.8	324.1	0.386D	1.025A	3.11	1.858	79.0	270.8	7.7	0.742
		6.73	19.85	26.58	ONE	0.784	298.2	0.0	151.6										
44950.0	45016.0	0.394	299.3	-12.3	4.22	0.827	111.7	0.479	0.742	208.9	325.0	0.387D	1.097A	4.04	1.877	78.8	270.1	9.8	0.761
		8.30	20.42	28.72	ONE	0.784	298.2	0.0	150.3										
44960.0	45016.0	0.521	296.8	-15.1	3.94	0.914	120.7	0.533	0.835	222.6	328.6	0.390D	1.280A	4.81	1.916	79.2	267.4	11.6	0.782
		11.23	21.04	32.27	ONE	0.784	298.2	0.0	147.2										
							ARRIVAL DATE = 2445018.0												
44860.0	45018.0	0.352	314.7	-30.0	-5.61	0.811	72.4	0.442	0.752	154.5	367.4	0.419	1.084	11.02	1.851	92.3	244.0	40.1	0.549
		7.42	14.20	21.62	TWO	0.816	305.2	0.0	111.7										
44870.0	45018.0	0.339	322.2	-33.7	-7.73	0.801	74.8	0.432	0.740	157.8	361.1	0.421	1.060	13.42	1.845	90.3	252.6	44.4	0.612
		7.16	16.05	23.21	TWO	0.816	305.2	0.0	115.7										
44880.0	45018.0	0.356	330.7	-43.5	-13.05	0.792	77.4	0.424	0.729	161.6	355.2	0.420D	1.038	19.01	1.840	88.6	263.0	54.1	0.740
		7.51	19.80	27.31	TWO	0.816	305.2	0.0	115.8										
44900.0	45018.0	0.461	305.9	27.5	25.11	0.776	83.4	0.415	0.710	170.5	343.3	0.415D	1.005	-18.63	1.830	85.1	272.2	-48.6	0.777
		9.81	20.89	30.70	ONE	0.816	305.2	0.0	123.7										
44910.0	45018.0	0.293	313.6	12.8	10.61	0.770	87.3	0.413	0.703	176.2	339.4	0.413D	0.994	-3.86	1.826	84.0	267.2	-11.7	0.604
		6.27	15.82	22.09	ONE	0.816	305.2	0.0	140.5										
44920.0	45018.0	0.263	312.4	3.3	6.80	0.770	91.9	0.415	0.700	182.7	336.0	0.410D	0.991A	0.23	1.824	83.0	269.1	0.7	0.616
		5.73	16.16	21.89	ONE	0.816	305.2	0.0	143.9										
44930.0	45018.0	0.269	307.4	-3.8	5.10	0.777	97.5	0.421	0.704	190.5	333.8	0.408D	1.000A	2.22	1.826	82.3	270.5	6.3	0.637
		5.85	16.78	22.63	ONE	0.816	305.2	0.0	144.8										
44940.0	45018.0	0.309	301.5	-9.5	4.18	0.799	104.0	0.434	0.719	199.9	333.1	0.407D	1.031A	3.45	1.834	81.9	270.8	9.6	0.655
		6.57	17.33	23.90	ONE	0.816	305.2	0.0	144.5										
44950.0	45018.0	0.387	297.0	-13.6	3.64	0.844	111.7	0.462	0.758	211.4	334.5	0.408D	1.109A	4.32	1.854	82.0	269.6	11.9	0.672
		8.16	17.80	25.96	ONE	0.816	305.2	0.0	142.7										
44960.0	45018.0	0.514	295.1	-16.2	3.31	0.929	120.2	0.520	0.855	225.3	338.2	0.410D	1.300A	5.02	1.894	82.6	266.1	13.8	0.691
		11.06	18.36	29.42	ONE	0.816	305.2	0.0	138.9										
							ARRIVAL DATE = 2445020.0												
44860.0	45020.0	0.340	313.8	-26.0	-3.61	0.813	72.8	0.435	0.754	154.4	373.9	0.426	1.083	9.41	1.825	94.2	239.2	36.9	0.495
		7.18	12.66	19.83	TWO	0.848	311.8	0.0	103.8										
44870.0	45020.0	0.319	320.3	-27.4	-4.63	0.805	75.3	0.424	0.743	157.8	367.6	0.429	1.058	10.64	1.819	92.3	247.8	39.2	0.531
		6.75	13.68	20.44	TWO	0.848	311.8	0.0	109.8										
44880.0	45020.0	0.305	326.7	-31.9	-6.73	0.796	77.9	0.414	0.733	161.7	361.7	0.430	1.036	12.95	1.814	90.5	255.7	43.9	0.586
		6.49	15.30	21.79	TWO	0.848	311.8	0.0	113.7										
44890.0	45020.0	0.332	334.9	-44.9	-13.00	0.789	80.9	0.407	0.724	166.2	356.4	0.429D	1.018	19.42	1.809	89.0	266.4	56.0	0.725
		7.01	19.37	26.38	TWO	0.848	311.8	0.0	113.1										
44910.0	45020.0	0.309	310.1	18.0	13.15	0.779	88.0	0.399	0.710	176.9	346.8	0.426D	0.993	-6.33	1.802	86.2	266.8	-20.8	0.559
		6.57	14.52	21.08	ONE	0.848	311.8	0.0	131.4										
44920.0	45020.0	0.254	310.2	3.4	6.72	0.780	92.5	0.400	0.708	183.8	343.8	0.425D	0.991A	0.30	1.801	85.4	268.2	1.0	0.548
		5.59	14.19	19.77	ONE	0.848	311.8	0.0	136.4										
44930.0	45020.0	0.261	305.2	-5.3	4.59	0.789	97.9	0.406	0.713	191.9	341.8	0.423D	1.002A	2.65	1.803	84.8	269.6	8.4	0.567
		5.69	14.75	20.44	ONE	0.848	311.8	0.0	137.1										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44940.0	45020.0	0.303	295.4	-11.2	3.56	0.811	104.3	0.420	0.730	201.7	341.5	0.423D	1.036A	3.89	1.812	84.5	269.7	12.1	0.584
		6.45	15.24	21.69	ONE	0.848	311.8	0.0	136.5										
44950.0	45020.0	0.382	295.3	-15.1	2.99	0.857	111.7	0.450	0.771	213.4	343.1	0.424D	1.118A	4.71	1.832	84.8	268.0	14.5	0.599
		8.05	15.68	23.73	ONE	0.848	311.8	0.0	134.3										
44960.0	45020.0	0.507	293.9	-17.3	2.64	0.940	119.8	0.510	0.870	227.3	346.8	0.426D	1.314A	5.32	1.872	85.6	263.8	16.2	0.618
		10.91	16.24	27.14	ONE	0.848	311.8	0.0	129.9										
								ARRIVAL DATE = 2445022.0											
44860.0	45022.0	0.334	313.0	-22.8	-2.16	0.815	73.0	0.431	0.756	154.3	380.1	0.430	1.082	8.34	1.801	96.0	233.6	34.1	0.463
		7.06	11.73	18.79	TWO	0.881	318.2	0.0	94.5										
44870.0	45022.0	0.308	316.0	-22.9	-2.64	0.807	75.5	0.418	0.746	157.8	373.8	0.434	1.057	8.96	1.796	94.1	242.7	35.5	0.481
		6.56	12.24	18.80	TWO	0.881	318.2	0.0	101.7										
44880.0	45022.0	0.286	324.1	-24.5	-3.51	0.800	78.3	0.407	0.736	161.8	368.0	0.437	1.035	9.98	1.791	92.3	250.5	37.6	0.508
		6.14	13.02	19.16	TWO	0.881	318.2	0.0	107.5										
44890.0	45022.0	0.271	328.7	-29.8	-5.50	0.793	81.3	0.398	0.727	166.3	362.8	0.438	1.016	12.10	1.787	90.8	257.6	42.5	0.555
		5.88	14.38	20.25	TWO	0.881	318.2	0.0	111.2										
44900.0	45022.0	0.316	337.1	-48.2	-13.61	0.788	84.7	0.392	0.720	171.6	358.2	0.438D	1.002	20.35	1.783	89.5	268.8	59.2	0.722
		6.73	19.28	26.01	TWO	0.881	318.2	0.0	109.5										
44910.0	45022.0	0.428	303.9	29.1	23.57	0.785	88.4	0.389	0.715	177.5	353.7	0.437D	0.993	-16.69	1.780	88.2	270.0	-50.5	0.662
		9.05	17.52	26.56	ONE	0.881	318.2	0.0	115.1										
44920.0	45022.0	0.247	308.6	3.3	6.57	0.788	93.0	0.389	0.714	184.7	351.0	0.436D	0.992A	0.44	1.780	87.5	266.3	1.6	0.492
		5.47	12.57	18.04	ONE	0.881	318.2	0.0	128.0										
44930.0	45022.0	0.253	303.7	-7.4	3.86	0.798	98.2	0.395	0.720	193.0	349.3	0.436D	1.004A	3.30	1.783	87.0	267.7	11.5	0.512
		5.56	13.14	18.70	ONE	0.881	318.2	0.0	128.5										
44940.0	45022.0	0.297	297.9	-13.3	2.79	0.821	104.4	0.410	0.738	203.0	349.2	0.436D	1.040A	4.51	1.792	86.9	267.6	15.5	0.528
		6.34	13.62	19.96	ONE	0.881	318.2	0.0	127.7										
44950.0	45022.0	0.377	294.2	-16.7	2.23	0.866	111.6	0.441	0.780	214.9	350.9	0.436D	1.124A	5.22	1.813	87.2	265.4	17.7	0.543
		7.95	14.05	22.00	ONE	0.881	318.2	0.0	125.2										
44960.0	45022.0	0.501	293.2	-18.5	1.91	0.946	119.5	0.503	0.879	228.6	354.5	0.437D	1.321A	5.71	1.852	88.2	260.4	19.0	0.564
		10.75	14.67	25.42	ONE	0.881	318.2	0.0	120.3										
								ARRIVAL DATE = 2445024.0											
44860.0	45024.0	0.332	312.5	-20.2	-1.03	0.816	73.0	0.430	0.757	154.1	386.0	0.432	1.082	7.59	1.781	97.7	227.9	31.3	0.449
		7.02	11.33	18.35	TWO	0.913	324.4	0.0	84.5										
44870.0	45024.0	0.304	318.1	-19.4	-1.21	0.809	75.7	0.415	0.747	157.7	379.8	0.437	1.057	7.85	1.776	95.8	237.1	32.2	0.453
		6.48	11.43	17.91	TWO	0.913	324.4	0.0	92.3										
44880.0	45024.0	0.278	322.4	-19.3	-1.52	0.802	78.5	0.402	0.738	161.7	374.1	0.441	1.035	8.24	1.771	94.0	245.1	33.1	0.463
		6.00	11.73	17.73	TWO	0.913	324.4	0.0	99.0										
44890.0	45024.0	0.255	325.3	-20.8	-2.12	0.796	81.5	0.392	0.730	166.4	368.9	0.444	1.016	8.92	1.767	92.5	252.0	34.7	0.480
		5.60	12.23	17.83	TWO	0.913	324.4	0.0	104.4										
44900.0	45024.0	0.240	327.0	-26.4	-3.73	0.792	84.9	0.385	0.723	171.8	364.4	0.445	1.001	10.60	1.764	91.2	258.0	39.1	0.514
		5.35	13.20	18.54	TWO	0.913	324.4	0.0	108.1										
44910.0	45024.0	0.351	339.4	-56.0	-17.63	0.790	88.8	0.381	0.719	178.0	360.7	0.445	0.993	24.57	1.761	90.2	273.5	67.6	0.792
		7.40	21.34	28.74	TWO	0.913	324.4	0.0	103.9										
44920.0	45024.0	0.241	307.7	2.6	6.21	0.793	93.2	0.381	0.719	185.3	357.7	0.445D	0.992A	0.80	1.761	89.4	263.1	3.1	0.449
		5.36	11.33	16.69	ONE	0.913	324.4	0.0	118.7										
44930.0	45024.0	0.245	303.1	-11.0	2.69	0.804	98.4	0.387	0.725	193.8	356.3	0.445D	1.006A	4.39	1.765	89.0	264.7	16.6	0.473
		5.44	12.02	17.46	ONE	0.913	324.4	0.0	118.9										
44940.0	45024.0	0.292	297.2	-16.2	1.75	0.827	104.5	0.402	0.744	203.9	356.2	0.445D	1.043A	5.41	1.775	88.9	264.4	20.0	0.490
		6.25	12.49	18.74	ONE	0.913	324.4	0.0	118.0										
44950.0	45024.0	0.373	293.7	-18.7	1.32	0.871	111.4	0.434	0.786	215.8	358.0	0.445D	1.127A	5.91	1.795	89.4	261.7	21.5	0.505
		7.85	12.94	20.79	ONE	0.913	324.4	0.0	115.3										
44960.0	45024.0	0.494	292.9	-19.9	1.09	0.949	119.1	0.496	0.883	229.3	361.3	0.445	1.321A	6.23	1.833	90.4	256.3	22.1	0.529
		10.59	13.63	24.22	ONE	0.913	324.4	0.0	110.2										
								ARRIVAL DATE = 2445026.0											
44860.0	45026.0	0.334	312.2	-18.1	-0.10	0.817	72.8	0.431	0.758	153.9	391.7	0.431	1.084	7.06	1.764	99.4	222.5	28.3	0.451
		7.05	11.37	18.43	TWO	0.944	330.3	0.0	74.4										
44870.0	45026.0	0.304	317.5	-16.6	-0.11	0.810	75.6	0.414	0.748	157.5	385.5	0.438	1.058	7.08	1.759	97.4	231.5	29.1	0.442
		6.47	11.13	17.60	TWO	0.944	330.3	0.0	82.3										
44880.0	45026.0	0.276	321.4	-15.6	-0.14	0.804	78.5	0.400	0.739	161.6	379.8	0.444	1.035	7.11	1.754	95.6	239.6	29.4	0.440
		5.96	11.07	17.03	TWO	0.944	330.3	0.0	89.4										
44890.0	45026.0	0.251	323.5	-15.1	-0.18	0.798	81.6	0.389	0.731	166.3	374.7	0.447	1.016	7.16	1.750	94.1	246.5	29.4	0.443
		5.52	11.14	16.67	TWO	0.944	330.3	0.0	95.4										
44900.0	45026.0	0.230	323.1	-15.6	-0.27	0.795	85.0	0.380	0.725	171.8	370.3	0.449	1.001	7.26	1.747	92.8	252.3	29.4	0.448
		5.18	11.30	16.49	TWO	0.944	330.3	0.0	100.4										
44910.0	45026.0	0.217	319.8	-17.8	-0.58	0.793	88.9	0.376	0.722	178.2	366.7	0.451	0.993	7.57	1.745	91.8	256.7	30.1	0.458
		4.99	11.58	16.57	TWO	0.944	330.3	0.0	104.1										
44920.0	45026.0	0.222	309.5	-6.8	3.14	0.797	93.3	0.375	0.722	185.6	364.0	0.451	0.993A	3.86	1.745	91.1	259.2	15.9	0.431
		5.07	10.79	15.87	ONE	0.944	330.3	0.0	108.1										
44930.0	45026.0	0.239	304.0	-18.3	0.42	0.808	98.5	0.381	0.729	194.2	362.6	0.451	1.006A	6.59	1.749	90.7	260.8	25.8	0.461
		5.33	11.66	16.99	ONE	0.944	330.3	0.0	108.4										
44940.0	45026.0	0.287	297.4	-20.4	0.23	0.831	104.4	0.396	0.748	204.4	362.7	0.451	1.044A	6.79	1.759	90.8	260.2	26.2	0.471
		6.17	11.96	18.12	ONE	0.944	330.3	0.0	107.8										
44950.0	45026.0	0.368	293.8	-21.3	0.16	0.874	111.1	0.428	0.789	216.2	364.3	0.451	1.127A	6.87	1.779	91.3	257.3	26.0	0.485
		7.75	12.35	20.10	ONE	0.944	330.3	0.0	105.2										
44960.0	45026.0	0.487	293.1	-21.5	0.13	0.949	118.6	0.490	0.882	229.5	367.4	0.450	1.315A	6.91	1.816	92.4	251.6	25.3	0.510
		10.42	13.09	23.51	ONE	0.944	330.3	0.0	100.2										
								ARRIVAL DATE = 2445028.0											
44860.0	45028.0	0.339	312.0	-16.2	0.70	0.817	72.5	0.435	0.758	153.6	397.2	0.428	1.087	6.67	1.749	101.0	218.0	25.3	0.466
		7.15	11.82	18.97	TWO	0.975	336.1	0.0	64.8										
44870.0	45028.0	0.307	317.2	-14.4	0.77	0.810	75.4	0.416	0.748	157.2	391.0	0.437	1.059	6.52	1.745	99.0	226.5	25.9	0.447
		6.53	11.27	17.80	TWO	0.975	336.1	0.0	72.4										
44880.0	45028.0	0.277	320.8	-12.6	0.90	0.804	78.3	0.400	0.740	161.3	385.4	0.444	1.036	6.33	1.740	97.2	234.2	26.0	0.435
		5.99	10.92	16.90	TWO	0.975	336.1	0.0	79.3										
44890.0	45028.0	0.251	322.5	-11.1	1.11	0.799	81.5	0.387	0.732	166.1	380.3	0.449	1.016	6.06	1.736	95.6	241.1	25.3	0.427
		5.53	10.69	16.23	TWO	0.975	336.1	0.0	85.5										
44900.0	45028.0	0.230	321.4	-9.6	1.52	0.796	85.0	0.378	0.727	171.7	375.9	0.452	1.001	5.59	1.733	94.4	246.9	23.5	0.422
		5.19	10.53	15.72	TWO	0.975	336.1	0.0	90.7										
44910.0	45028.0	0.218	316.5	-6.9	2.53	0.795	88.9	0.373	0.723	178.1	372.4	0.454	0.993	4.52	1.731	93.4	251.3	19.2	0.414
		5.01	10.32	15.33	TWO	0.975	336.1	0.0	94.9										
44920.0	45028.0	0.252	305.5	9.0	8.40	0.799	93.3	0.372	0.724	185.6	369.9	0.455	0.993A	-1.41	1.732	92.7	254.2	-6.1	0.402
		5.54	9.97	15.52	TWO	0.975	336.1	0.0	98.0										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44930.0	45028.0	0.255	310.4	-38.5	-6.10	0.810	98.3	0.377	0.731	194.3	368.4	0.455	1.006A	13.04	1.735	92.3	256.8	47.2	0.533
		5.59	13.75	19.35	ONE	0.975	336.1	0.0	97.2										
44940.0	45028.0	0.286	299.0	-27.3	-2.27	0.833	104.2	0.392	0.749	204.5	368.5	0.455	1.043A	9.15	1.745	92.4	255.5	35.2	0.481
		6.15	12.25	18.39	ONE	0.975	336.1	0.0	97.6										
44950.0	45028.0	0.364	294.6	-24.8	-1.42	0.874	110.8	0.424	0.789	216.1	370.0	0.455	1.124A	8.25	1.764	93.0	252.4	31.5	0.484
		7.66	12.33	20.00	ONE	0.975	336.1	0.0	95.4										
44960.0	45028.0	0.479	293.8	-23.5	-1.05	0.945	118.2	0.484	0.878	229.1	372.8	0.453	1.303A	7.83	1.800	94.2	246.9	28.8	0.508
		10.24	13.03	23.26	ONE	0.975	336.1	0.0	90.6										
ARRIVAL DATE = 2445030.0																			
44860.0	45030.0	0.346	312.0	-14.6	1.40	0.817	71.9	0.441	0.757	153.3	402.5	0.424	1.091	6.38	1.738	102.7	214.6	22.4	0.494
		7.31	12.62	19.93	TWO	1.005	341.9	0.0	56.0										
44870.0	45030.0	0.313	317.1	-12.5	1.52	0.810	74.9	0.420	0.748	156.8	396.3	0.434	1.062	6.11	1.733	100.5	222.3	22.9	0.465
		6.64	11.80	18.43	TWO	1.005	341.9	0.0	63.0										
44880.0	45030.0	0.282	320.6	-10.3	1.72	0.804	78.0	0.402	0.740	160.9	390.6	0.442	1.038	5.77	1.729	98.7	229.6	22.7	0.444
		6.07	11.18	17.25	TWO	1.005	341.9	0.0	69.6										
44890.0	45030.0	0.254	322.1	-8.2	2.05	0.800	81.3	0.388	0.733	165.8	385.6	0.448	1.017	5.31	1.725	97.1	236.2	21.7	0.428
		5.59	10.73	16.32	TWO	1.005	341.9	0.0	75.5										
44900.0	45030.0	0.233	320.8	-5.9	2.63	0.797	84.8	0.378	0.727	171.3	381.3	0.452	1.002	4.60	1.722	95.8	241.8	19.3	0.416
		5.24	10.36	15.60	TWO	1.005	341.9	0.0	80.5										
44910.0	45030.0	0.222	315.7	-2.3	3.85	0.796	88.7	0.372	0.724	177.8	377.8	0.455	0.993	3.26	1.720	94.8	246.2	14.0	0.404
		5.08	10.03	15.10	TWO	1.005	341.9	0.0	84.5										
44920.0	45030.0	0.244	306.6	7.2	7.60	0.800	93.1	0.370	0.724	185.3	375.3	0.456	0.992A	-0.60	1.720	94.1	249.2	-2.6	0.395
		5.42	9.78	15.21	TWO	1.005	341.9	0.0	87.4										
44940.0	45030.0	0.303	304.0	-40.1	-7.29	0.833	103.9	0.390	0.749	204.1	373.7	0.457	1.041A	14.06	1.734	93.8	250.2	49.7	0.551
		6.46	14.28	20.73	ONE	1.005	341.9	0.0	88.9										
44950.0	45030.0	0.362	296.4	-29.8	-3.75	0.872	110.4	0.421	0.787	215.6	375.1	0.456	1.118A	10.39	1.752	94.5	247.4	38.4	0.508
		7.63	13.02	20.65	ONE	1.005	341.9	0.0	86.5										
44960.0	45030.0	0.472	295.0	-26.1	-2.57	0.940	117.7	0.478	0.870	228.3	377.7	0.454	1.286A	9.09	1.786	95.7	242.4	32.6	0.522
		10.06	13.43	23.49	ONE	1.005	341.9	0.0	82.1										
ARRIVAL DATE = 2445032.0																			
44860.0	45032.0	0.357	312.0	-13.3	2.05	0.816	71.2	0.449	0.757	152.9	407.8	0.417	1.096	6.18	1.729	104.3	212.3	19.8	0.532
		7.53	13.72	21.25	TWO	1.034	347.5	0.0	48.2										
44870.0	45032.0	0.321	317.2	-10.9	2.18	0.810	74.3	0.426	0.748	156.3	401.4	0.429	1.066	5.80	1.725	102.1	219.3	20.2	0.495
		6.81	12.65	19.45	TWO	1.034	347.5	0.0	54.5										
44880.0	45032.0	0.289	320.7	-8.5	2.41	0.804	77.5	0.407	0.739	160.4	395.7	0.439	1.040	5.35	1.720	100.1	225.9	19.8	0.466
		6.19	11.80	18.00	TWO	1.034	347.5	0.0	60.5										
44890.0	45032.0	0.260	322.2	-6.0	2.78	0.799	80.9	0.392	0.732	165.2	390.7	0.446	1.019	4.77	1.716	98.5	232.0	18.6	0.443
		5.69	11.15	16.83	TWO	1.034	347.5	0.0	66.0										
44900.0	45032.0	0.238	320.5	-3.3	3.40	0.796	84.4	0.380	0.727	170.8	386.3	0.451	1.003	3.95	1.713	97.2	237.4	16.0	0.425
		5.32	10.62	15.94	TWO	1.034	347.5	0.0	70.7										
44910.0	45032.0	0.227	316.1	0.3	4.59	0.796	88.4	0.373	0.723	177.3	382.8	0.454	0.993	2.58	1.712	96.1	241.6	10.8	0.410
		5.15	10.20	15.34	TWO	1.034	347.5	0.0	74.5										
44920.0	45032.0	0.242	307.8	6.9	7.38	0.799	92.8	0.370	0.724	184.7	380.3	0.456	0.992A	-0.39	1.712	95.5	244.6	-1.7	0.402
		5.39	9.96	15.35	TWO	1.034	347.5	0.0	77.1										
44930.0	45032.0	0.392	298.8	25.2	20.20	0.810	97.8	0.375	0.730	193.5	379.2	0.457	1.004A	-13.39	1.715	95.2	244.2	-47.8	0.534
		8.26	13.78	22.04	TWO	1.034	347.5	0.0	81.2										
44940.0	45032.0	0.451	326.7	-60.6	-22.70	0.831	103.4	0.388	0.747	203.3	378.1	0.457	1.037A	29.34	1.724	95.0	234.5	76.6	0.865
		9.57	23.50	33.06	ONE	1.034	347.5	0.0	84.8										
44950.0	45032.0	0.371	300.3	-37.9	-7.65	0.868	109.9	0.418	0.783	214.6	379.6	0.456	1.110A	14.12	1.742	95.8	242.1	47.9	0.570
		7.82	14.82	22.64	ONE	1.034	347.5	0.0	79.8										
44960.0	45032.0	0.466	296.9	-29.6	-4.66	0.932	117.1	0.473	0.859	227.1	382.0	0.453	1.265A	10.94	1.774	97.0	238.5	37.2	0.553
		9.92	14.33	24.25	ONE	1.034	347.5	0.0	75.0										
ARRIVAL DATE = 2445034.0																			
44860.0	45034.0	0.371	312.2	-12.1	2.65	0.815	70.2	0.460	0.755	152.5	412.9	0.408	1.103	6.05	1.723	106.0	211.0	17.6	0.579
		7.82	15.09	22.91	TWO	1.062	353.0	0.0	41.3										
44870.0	45034.0	0.333	317.4	-9.6	2.77	0.808	73.5	0.435	0.747	155.8	406.4	0.422	1.071	5.58	1.719	103.6	217.3	17.7	0.534
		7.03	13.78	20.81	TWO	1.062	353.0	0.0	47.0										
44880.0	45034.0	0.298	321.1	-6.9	3.00	0.803	76.9	0.414	0.738	159.8	400.7	0.433	1.044	5.04	1.714	101.6	223.3	17.2	0.498
		6.37	12.73	19.10	TWO	1.062	353.0	0.0	52.4										
44890.0	45034.0	0.268	322.8	-4.2	3.37	0.798	80.3	0.397	0.731	164.6	395.5	0.441	1.022	4.38	1.711	99.9	228.9	15.9	0.469
		5.83	11.89	17.71	TWO	1.062	353.0	0.0	57.4										
44900.0	45034.0	0.245	321.7	-1.4	3.99	0.795	83.9	0.384	0.726	170.1	391.1	0.447	1.004	3.49	1.708	98.5	233.8	13.3	0.446
		5.42	11.22	16.65	TWO	1.062	353.0	0.0	61.7										
44910.0	45034.0	0.232	317.1	2.0	5.07	0.794	87.9	0.375	0.722	176.5	387.6	0.451	0.993	2.16	1.706	97.4	237.9	8.6	0.428
		5.22	10.71	15.94	TWO	1.062	353.0	0.0	65.2										
44920.0	45034.0	0.242	309.4	7.0	7.27	0.798	92.3	0.372	0.723	183.9	385.0	0.454	0.991A	-0.29	1.706	96.7	240.8	-1.2	0.418
		5.39	10.44	15.82	TWO	1.062	353.0	0.0	67.7										
44930.0	45034.0	0.314	300.7	17.3	13.58	0.807	97.3	0.375	0.728	192.5	383.7	0.455	1.002A	-6.83	1.709	96.4	241.5	-26.4	0.455
		6.66	11.49	18.15	TWO	1.062	353.0	0.0	70.8										
44950.0	45034.0	0.423	310.7	-50.8	-15.69	0.863	109.2	0.415	0.777	213.3	383.6	0.454	1.099A	21.97	1.734	96.9	233.1	62.6	0.725
		8.95	19.38	28.33	ONE	1.062	353.0	0.0	76.8										
44960.0	45034.0	0.465	300.1	-34.8	-7.78	0.923	116.4	0.467	0.847	225.5	385.8	0.451	1.242A	13.83	1.764	98.2	234.7	43.4	0.607
		9.91	15.92	25.83	ONE	1.062	353.0	0.0	69.9										
ARRIVAL DATE = 2445036.0																			
44860.0	45036.0	0.388	312.5	-11.2	3.24	0.813	69.1	0.475	0.754	152.1	418.0	0.396	1.112	5.98	1.720	107.8	210.6	15.6	0.634
		8.19	16.71	24.89	TWO	1.089	358.5	0.0	35.3										
44870.0	45036.0	0.347	317.9	-8.5	3.33	0.807	72.6	0.446	0.745	155.2	411.4	0.413	1.078	5.42	1.716	105.3	216.3	15.6	0.582
		7.32	15.17	22.49	TWO	1.089	358.5	0.0	40.4										
44880.0	45036.0	0.311	321.7	-5.7	3.53	0.801	76.0	0.423	0.737	159.1	405.5	0.425	1.049	4.80	1.711	103.1	221.8	15.0	0.539
		6.60	13.91	20.51	TWO	1.089	358.5	0.0	45.3										
44890.0	45036.0	0.278	323.6	-2.9	3.87	0.796	79.5	0.404	0.730	163.8	400.2	0.435	1.025	4.08	1.708	101.3	226.9	13.7	0.504
		6.00	12.90	18.91	TWO	1.089	358.5	0.0	49.7										
44900.0	45036.0	0.253	322.8	0.1	4.45	0.793	83.2	0.390	0.724	169.2	395.8	0.442	1.006	3.16	1.704	99.8	231.4	11.2	0.476
		5.56	12.10	17.66	TWO	1.089	358.5	0.0	53.7										
44910.0	45036.0	0.238	318.8	3.2	5.42	0.792	87.3	0.380	0.721	175.5	392.1	0.447	0.994	1.87	1.702	98.7	235.2	6.9	0.455
		5.32	11.49	16.81	TWO	1.089	358.5	0.0	56.9										
44920.0	45036.0	0.243	311.5	7.2	7.21	0.795	91.7	0.375	0.720	182.8	389.5	0.450	0.991A	-0.23	1.702	97.9	237.9	-0.9	0.443
		5.40	11.16	16.56	TWO	1.089	358.5	0.0	59.4										
44930.0	45036.0	0.289	303.1	13.7	11.30	0.804	96.7	0.377	0.725	191.3	388.0	0.452	0.999A	-4.62	1.705	97.6	239.0	-17.3	0.458
		6.20	11.57	17.77	TWO	1.089	358.5	0.0	61.9										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
44940.0	45036.0	0.504	295.5	27.5	27.29	0.822	102.4	0.390	0.740	201.0	388.0	0.451	1.028A	-20.89	1.713	97.8	230.1	-59.4	0.703
		10.82	18.73	29.55	TWO	1.089	358.5	0.0	71.5										
44960.0	45036.0	0.483	306.3	-42.6	-13.08	0.912	115.6	0.462	0.832	223.6	389.2	0.448	1.217A	18.90	1.756	99.1	229.7	52.5	0.708
		10.32	18.87	29.19	ONE	1.089	358.5	0.0	67.6										
ARRIVAL DATE = 2445038.0																			
44860.0	45038.0	0.409	312.8	-10.4	3.81	0.812	67.6	0.492	0.753	151.7	423.1	0.382	1.123	5.97	1.720	109.7	210.8	14.0	0.698
		8.64	18.57	27.21	TWO	1.115	4.0	0.0	30.0										
44870.0	45038.0	0.365	318.4	-7.6	3.85	0.805	71.3	0.461	0.744	154.7	416.3	0.401	1.086	5.32	1.716	107.0	216.1	13.8	0.637
		7.68	16.79	24.48	TWO	1.115	4.0	0.0	34.6										
44880.0	45038.0	0.325	322.5	-4.7	4.01	0.799	74.9	0.435	0.735	158.4	410.2	0.416	1.055	4.63	1.711	104.6	221.1	13.1	0.587
		6.88	15.33	22.22	TWO	1.115	4.0	0.0	39.0										
44890.0	45038.0	0.291	324.7	-1.8	4.32	0.794	78.6	0.414	0.728	162.8	404.8	0.427	1.029	3.85	1.707	102.7	225.8	11.8	0.547
		6.23	14.15	20.38	TWO	1.115	4.0	0.0	43.1										
44900.0	45038.0	0.263	324.3	1.2	4.83	0.791	82.4	0.397	0.722	168.1	400.2	0.435	1.009	2.91	1.704	101.1	229.9	9.5	0.514
		5.73	13.21	18.94	TWO	1.115	4.0	0.0	46.6										
44910.0	45038.0	0.245	320.8	4.2	5.68	0.789	86.5	0.386	0.718	174.3	396.5	0.441	0.995	1.66	1.702	99.9	233.4	5.7	0.490
		5.44	12.50	17.94	TWO	1.115	4.0	0.0	49.6										
44920.0	45038.0	0.246	314.1	7.5	7.17	0.792	90.9	0.380	0.717	181.5	393.7	0.445	0.990A	-0.20	1.701	99.1	236.0	-0.7	0.475
		5.44	12.08	17.52	TWO	1.115	4.0	0.0	52.0										
44930.0	45038.0	0.278	305.9	11.8	10.13	0.800	95.9	0.381	0.722	189.8	392.0	0.447	0.997A	-3.51	1.704	98.7	237.3	-12.4	0.480
		5.99	12.22	18.21	TWO	1.115	4.0	0.0	54.2										
44940.0	45038.0	0.387	300.0	20.3	18.08	0.816	101.6	0.391	0.734	199.3	391.6	0.447	1.021A	-11.81	1.711	98.7	234.9	-37.5	0.568
		8.16	14.77	22.92	TWO	1.115	4.0	0.0	60.0										
44960.0	45038.0	0.568	321.4	-53.3	-24.11	0.900	114.7	0.457	0.817	221.4	392.1	0.444	1.191A	29.71	1.751	99.9	214.6	66.1	0.934
		12.40	25.54	37.94	ONE	1.115	4.0	0.0	69.6										
ARRIVAL DATE = 2445040.0																			
44860.0	45040.0	0.434	313.1	-9.8	4.39	0.810	65.9	0.513	0.751	151.4	428.2	0.366	1.136	6.01	1.723	111.8	211.6	12.6	0.769
		9.19	20.68	29.87	TWO	1.139	9.6	0.0	25.2										
44870.0	45040.0	0.386	318.9	-6.9	4.36	0.803	69.9	0.478	0.742	154.1	421.2	0.387	1.096	5.27	1.718	108.8	216.5	12.3	0.700
		8.13	18.65	26.78	TWO	1.139	9.6	0.0	29.5										
44880.0	45040.0	0.343	323.4	-4.0	4.47	0.797	73.7	0.449	0.733	157.6	414.9	0.404	1.062	4.51	1.714	106.3	221.2	11.6	0.643
		7.24	16.98	24.21	TWO	1.139	9.6	0.0	33.5										
44890.0	45040.0	0.306	326.0	-0.9	4.72	0.791	77.4	0.426	0.726	161.9	409.4	0.417	1.035	3.68	1.710	104.2	225.5	10.3	0.597
		6.51	15.61	22.12	TWO	1.139	9.6	0.0	37.2										
44900.0	45040.0	0.275	326.1	2.1	5.16	0.787	81.3	0.407	0.719	167.0	404.6	0.426	1.013	2.72	1.706	102.5	229.4	8.1	0.559
		5.95	14.52	20.47	TWO	1.139	9.6	0.0	40.5										
44910.0	45040.0	0.254	323.3	5.0	5.90	0.786	85.5	0.394	0.715	173.0	400.7	0.433	0.997	1.51	1.704	101.2	232.7	4.7	0.531
		5.58	13.70	19.28	TWO	1.139	9.6	0.0	43.3										
44920.0	45040.0	0.249	317.1	7.8	7.14	0.787	90.0	0.387	0.714	180.0	397.7	0.438	0.990	-0.17	1.703	100.3	235.1	-0.6	0.513
		5.50	13.18	18.68	TWO	1.139	9.6	0.0	45.6										
44930.0	45040.0	0.272	309.2	10.9	9.40	0.794	95.0	0.386	0.717	188.1	395.8	0.441	0.994A	-2.85	1.705	99.7	236.5	-9.4	0.512
		5.88	13.14	19.02	TWO	1.139	9.6	0.0	47.6										
44940.0	45040.0	0.344	302.4	15.9	14.38	0.809	100.6	0.394	0.728	197.3	395.1	0.441	1.015A	-8.23	1.711	99.7	235.8	-25.9	0.554
		7.25	14.36	21.61	TWO	1.139	9.6	0.0	51.4										
44950.0	45040.0	0.586	302.6	27.0	31.53	0.838	107.1	0.416	0.752	207.7	396.1	0.439	1.065A	-25.77	1.724	100.4	220.2	-59.9	0.852
		12.84	23.10	35.94	TWO	1.139	9.6	0.0	64.5										
ARRIVAL DATE = 2445042.0																			
44860.0	45042.0	0.463	313.4	-9.4	4.99	0.808	63.9	0.537	0.749	151.2	433.6	0.347	1.151	6.11	1.729	114.1	212.8	11.4	0.850
		9.86	23.05	32.91	TWO	1.163	15.2	0.0	20.9										
44870.0	45042.0	0.410	319.5	-6.4	4.88	0.800	68.1	0.499	0.739	153.5	426.2	0.371	1.108	5.27	1.724	110.8	217.5	11.1	0.772
		8.67	20.74	29.41	TWO	1.163	15.2	0.0	24.8										
44880.0	45042.0	0.364	324.3	-3.4	4.91	0.794	72.1	0.467	0.731	156.8	419.7	0.390	1.072	4.43	1.719	108.1	221.9	10.3	0.707
		7.67	18.84	26.51	TWO	1.163	15.2	0.0	28.5										
44890.0	45042.0	0.324	327.4	-0.3	5.09	0.788	76.1	0.441	0.723	160.8	413.9	0.404	1.041	3.55	1.715	105.8	226.0	9.0	0.654
		6.85	17.28	24.13	TWO	1.163	15.2	0.0	32.0										
44900.0	45042.0	0.290	328.1	2.7	5.46	0.784	80.1	0.420	0.716	165.7	408.9	0.416	1.017	2.57	1.711	103.9	229.6	7.0	0.611
		6.21	16.02	22.23	TWO	1.163	15.2	0.0	35.1										
44910.0	45042.0	0.265	326.0	5.6	6.08	0.781	84.3	0.404	0.712	171.5	404.8	0.424	1.000	1.39	1.709	102.5	232.7	4.0	0.578
		5.77	15.07	20.84	TWO	1.163	15.2	0.0	37.7										
44920.0	45042.0	0.255	320.5	8.1	7.11	0.782	88.9	0.395	0.710	178.3	401.6	0.430	0.990	-0.15	1.707	101.4	235.1	-0.5	0.557
		5.60	14.44	20.03	TWO	1.163	15.2	0.0	39.9										
44930.0	45042.0	0.269	312.9	10.4	8.90	0.788	93.9	0.392	0.712	186.1	399.4	0.433	0.991A	-2.42	1.709	100.8	236.5	-7.4	0.550
		5.83	14.24	20.07	TWO	1.163	15.2	0.0	41.9										
44940.0	45042.0	0.321	305.6	13.5	12.37	0.801	99.6	0.398	0.721	195.1	398.5	0.434	1.008A	-6.35	1.714	100.7	236.5	-19.0	0.572
		6.79	14.90	21.69	TWO	1.163	15.2	0.0	44.8										
44950.0	45042.0	0.454	302.2	20.2	21.17	0.827	105.9	0.417	0.742	205.2	398.8	0.432	1.052A	-15.59	1.725	101.2	231.8	-40.8	0.696
		9.65	18.51	28.16	TWO	1.163	15.2	0.0	52.6										
ARRIVAL DATE = 2445044.0																			
44860.0	45044.0	0.497	313.6	-9.1	5.62	0.805	61.6	0.566	0.747	151.1	439.1	0.324	1.169	6.28	1.737	116.7	214.4	10.4	0.941
		10.66	25.73	36.39	TWO	1.186	20.8	0.0	17.0										
44870.0	45044.0	0.439	320.1	-6.1	5.40	0.798	66.1	0.523	0.737	153.1	431.4	0.352	1.123	5.32	1.732	113.0	218.9	10.0	0.852
		9.32	23.10	32.42	TWO	1.186	20.8	0.0	20.6										
44880.0	45044.0	0.389	325.3	-3.0	5.34	0.791	70.3	0.487	0.728	156.0	424.5	0.373	1.083	4.40	1.728	110.0	223.2	9.2	0.778
		8.20	20.93	29.13	TWO	1.186	20.8	0.0	24.1										
44890.0	45044.0	0.345	328.9	0.2	5.45	0.785	74.5	0.458	0.720	159.8	418.5	0.390	1.050	3.46	1.723	107.5	227.0	8.0	0.718
		7.27	19.15	26.42	TWO	1.186	20.8	0.0	27.3										
44900.0	45044.0	0.307	330.3	3.2	5.73	0.780	78.6	0.435	0.713	164.4	413.2	0.403	1.023	2.46	1.719	105.4	230.5	6.1	0.669
		6.53	17.71	24.25	TWO	1.186	20.8	0.0	30.2										
44910.0	45044.0	0.278	328.9	6.0	6.24	0.777	83.0	0.417	0.708	169.9	408.8	0.413	1.003	1.30	1.716	103.8	233.4	3.4	0.631
		6.00	16.61	22.61	TWO	1.186	20.8	0.0	32.8										
44920.0	45044.0	0.263	324.3	8.4	7.09	0.776	87.6	0.405	0.705	176.5	405.4	0.420	0.991	-0.14	1.715	102.7	235.7	-0.4	0.605
		5.73	15.84	21.57	TWO	1.186	20.8	0.0	34.9										
44930.0	45044.0	0.268	317.0	10.3	8.52	0.781	92.7	0.400	0.707	184.0	403.0	0.424	0.989A	-2.11	1.715	101.9	237.3	-6.0	0.593
		5.83	15.50	21.33	TWO	1.186	20.8	0.0	36.9										
44940.0	45044.0	0.306	309.4	12.0	11.08	0.792	98.4	0.404	0.714	192.7	401.7	0.425	1.002A	-5.19	1.720	101.7	237.7	-14.6	0.604
		6.52	15.82	22.34	TWO	1.186	20.8	0.0	39.3										
44950.0	45044.0	0.397	304.5	15.8	16.53	0.815	104.7	0.420	0.732	202.5	401.6	0.425	1.039A	-11.13	1.730	102.0	235.6	-29.2	0.669
		8.38	17.72	26.10	TWO	1.186	20.8	0.0	44.2										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
									ARRIVAL DATE = 2445046.0										
44860.0	45046.0	0.537	313.7	-9.0	6.31	0.803	58.8	0.599	0.745	151.3	445.0	0.299	1.191	6.52	1.749	119.6	216.2	9.5	1.043
		11.62	28.74	40.37	TWO	1.208	26.6	0.0	13.5										
44870.0	45046.0	0.473	320.7	-5.9	5.95	0.795	63.7	0.551	0.735	152.8	436.8	0.330	1.140	5.42	1.744	115.5	220.7	9.1	0.942
		10.10	25.76	35.86	TWO	1.208	26.6	0.0	16.7										
44880.0	45046.0	0.418	326.3	-2.8	5.79	0.787	68.2	0.512	0.725	155.3	429.6	0.354	1.097	4.41	1.739	112.1	224.8	8.3	0.858
		8.83	23.29	32.12	TWO	1.208	26.6	0.0	20.0										
44890.0	45046.0	0.369	330.4	0.4	5.80	0.781	72.6	0.479	0.717	158.7	423.2	0.374	1.060	3.41	1.734	109.4	228.5	7.1	0.789
		7.78	21.25	29.03	TWO	1.208	26.6	0.0	23.0										
44900.0	45046.0	0.328	332.4	3.5	5.99	0.775	76.9	0.452	0.710	163.1	417.6	0.389	1.031	2.38	1.730	107.1	231.9	5.4	0.733
		6.93	19.61	26.54	TWO	1.208	26.6	0.0	25.8										
44910.0	45046.0	0.294	331.9	6.4	6.39	0.771	81.4	0.432	0.704	168.3	413.0	0.400	1.008	1.23	1.727	105.3	234.7	3.0	0.689
		6.30	18.32	24.61	TWO	1.208	26.6	0.0	28.3										
44920.0	45046.0	0.273	328.2	8.7	7.08	0.770	86.1	0.418	0.700	174.5	409.2	0.408	0.993	-0.13	1.725	104.0	237.0	-0.3	0.658
		5.91	17.40	23.31	TWO	1.208	26.6	0.0	30.5										
44930.0	45046.0	0.271	321.6	10.3	8.22	0.773	91.3	0.410	0.701	181.8	406.5	0.413	0.988A	-1.89	1.725	103.1	238.6	-4.9	0.641
		5.87	16.90	22.77	TWO	1.208	26.6	0.0	32.4										
44940.0	45046.0	0.297	313.8	11.3	10.17	0.783	97.0	0.411	0.706	190.2	404.9	0.416	0.997A	-4.41	1.728	102.7	239.3	-11.6	0.643
		6.35	16.98	23.32	TWO	1.208	26.6	0.0	34.5										
44950.0	45046.0	0.365	307.9	13.1	13.88	0.803	103.4	0.424	0.721	199.7	404.5	0.416	1.027A	-8.67	1.737	102.8	238.4	-22.0	0.682
		7.69	18.10	25.79	TWO	1.208	26.6	0.0	38.0										
44960.0	45046.0	0.511	306.3	18.4	22.74	0.840	110.5	0.453	0.753	210.2	405.3	0.412	1.094A	-18.05	1.754	103.7	232.8	-39.9	0.823
		11.00	22.27	33.27	TWO	1.208	26.6	0.0	46.5										
									ARRIVAL DATE = 2445048.0										
44860.0	45048.0	0.583	313.7	-9.1	7.07	0.801	55.6	0.637	0.743	151.8	451.4	0.270	1.216	6.87	1.764	122.9	218.2	8.8	1.158
		12.77	32.16	44.93	TWO	1.228	32.5	0.0	10.5										
44870.0	45048.0	0.513	321.1	-5.9	6.54	0.792	60.9	0.584	0.732	152.7	442.6	0.304	1.160	5.60	1.759	118.3	222.7	8.3	1.043
		11.04	28.76	39.80	TWO	1.228	32.5	0.0	13.2										
44880.0	45048.0	0.452	327.2	-2.7	6.25	0.784	65.8	0.540	0.722	154.8	434.9	0.332	1.113	4.47	1.753	114.6	226.8	7.5	0.948
		9.59	25.94	35.53	TWO	1.228	32.5	0.0	16.1										
44890.0	45048.0	0.398	331.8	0.6	6.15	0.777	70.4	0.503	0.714	157.8	428.1	0.354	1.073	3.40	1.749	111.5	230.5	6.4	0.869
		8.40	23.61	32.00	TWO	1.228	32.5	0.0	19.1										
44900.0	45048.0	0.352	334.6	3.7	6.23	0.770	74.9	0.473	0.706	161.8	422.2	0.372	1.040	2.33	1.744	108.9	233.7	4.8	0.805
		7.42	21.71	29.13	TWO	1.228	32.5	0.0	21.8										
44910.0	45048.0	0.314	335.0	6.6	6.52	0.765	79.5	0.450	0.699	166.7	417.2	0.385	1.014	1.18	1.740	106.9	236.5	2.6	0.754
		6.66	20.22	26.88	TWO	1.228	32.5	0.0	24.2										
44920.0	45048.0	0.287	332.3	9.0	7.06	0.763	84.4	0.433	0.695	172.6	413.1	0.394	0.996	-0.12	1.738	105.4	238.8	-0.3	0.717
		6.16	19.12	25.27	TWO	1.228	32.5	0.0	26.4										
44930.0	45048.0	0.277	326.4	10.5	7.97	0.765	89.6	0.423	0.694	179.5	410.1	0.401	0.988	-1.72	1.737	104.3	240.5	-4.2	0.694
		5.98	18.45	24.42	TWO	1.228	32.5	0.0	28.3										
44940.0	45048.0	0.292	318.8	11.0	9.48	0.772	95.4	0.421	0.698	187.5	408.1	0.404	0.992A	-3.86	1.740	103.7	241.4	-9.5	0.689
		6.26	18.30	24.56	TWO	1.228	32.5	0.0	30.3										
44950.0	45048.0	0.344	312.1	11.6	12.14	0.790	101.8	0.430	0.711	196.7	407.3	0.405	1.016A	-7.13	1.747	103.7	241.2	-17.2	0.711
		7.25	18.97	26.22	TWO	1.228	32.5	0.0	33.1										
44960.0	45048.0	0.448	308.6	14.1	17.59	0.823	109.0	0.454	0.737	206.9	407.7	0.403	1.072A	-13.15	1.761	104.4	238.6	-29.4	0.792
		9.51	21.33	30.84	TWO	1.228	32.5	0.0	38.5										
									ARRIVAL DATE = 2445050.0										
44870.0	45050.0	0.559	321.4	-6.1	7.19	0.789	57.6	0.622	0.730	153.0	448.9	0.276	1.184	5.85	1.777	121.6	224.9	7.7	1.158
		12.16	32.16	44.32	TWO	1.248	38.5	0.0	10.0										
44880.0	45050.0	0.491	328.0	-2.8	6.74	0.780	62.9	0.573	0.720	154.5	440.6	0.307	1.132	4.58	1.771	117.4	229.0	6.9	1.049
		10.51	28.93	39.45	TWO	1.248	38.5	0.0	12.5										
44890.0	45050.0	0.432	333.2	0.5	6.51	0.772	67.8	0.532	0.710	157.0	433.4	0.332	1.088	3.42	1.766	113.9	232.7	5.8	0.959
		9.14	26.26	35.40	TWO	1.248	38.5	0.0	15.3										
44900.0	45050.0	0.380	336.8	3.7	6.48	0.765	72.6	0.498	0.702	160.5	427.0	0.352	1.051	2.30	1.761	111.0	236.0	4.3	0.885
		8.01	24.08	32.09	TWO	1.248	38.5	0.0	18.0										
44910.0	45050.0	0.337	338.0	6.7	6.65	0.759	77.4	0.471	0.695	165.1	421.6	0.368	1.022	1.15	1.757	108.7	238.8	2.3	0.826
		7.12	22.34	29.45	TWO	1.248	38.5	0.0	20.4										
44920.0	45050.0	0.304	336.4	9.1	7.05	0.756	82.4	0.451	0.690	170.6	417.2	0.379	1.001	-0.11	1.754	106.9	241.1	-0.2	0.781
		6.47	21.02	27.49	TWO	1.248	38.5	0.0	22.6										
44930.0	45050.0	0.286	331.6	10.7	7.75	0.756	87.8	0.438	0.688	177.1	413.8	0.387	0.989	-1.59	1.753	105.7	242.8	-3.6	0.752
		6.14	20.15	26.29	TWO	1.248	38.5	0.0	24.6										
44940.0	45050.0	0.291	324.3	11.1	8.92	0.761	93.6	0.432	0.690	184.8	411.4	0.392	0.989A	-3.46	1.754	104.9	243.9	-7.9	0.739
		6.24	19.79	26.03	TWO	1.248	38.5	0.0	26.5										
44950.0	45050.0	0.329	317.0	10.8	10.89	0.776	100.1	0.438	0.700	193.6	410.2	0.393	1.006A	-6.08	1.760	104.7	244.1	-13.9	0.751
		6.95	20.12	27.07	TWO	1.248	38.5	0.0	28.9										
44960.0	45050.0	0.409	312.2	11.5	14.53	0.805	107.4	0.457	0.722	203.4	410.1	0.392	1.052A	-10.34	1.772	105.2	242.8	-22.5	0.801
		8.64	21.60	30.24	TWO	1.248	38.5	0.0	32.7										
									ARRIVAL DATE = 2445052.0										
44880.0	45052.0	0.537	328.6	-3.1	7.27	0.777	59.5	0.611	0.717	154.4	446.8	0.278	1.155	4.76	1.792	120.6	231.5	6.3	1.164
		11.62	32.34	43.96	TWO	1.266	44.8	0.0	9.2										
44890.0	45052.0	0.471	334.5	0.4	6.89	0.768	64.8	0.565	0.707	156.4	439.0	0.307	1.106	3.48	1.787	116.6	235.2	5.3	1.060
		10.05	29.26	39.31	TWO	1.266	44.8	0.0	11.7										
44900.0	45052.0	0.414	338.7	3.6	6.73	0.760	69.9	0.527	0.698	159.5	432.2	0.330	1.066	2.30	1.782	113.4	238.5	3.9	0.975
		8.74	26.73	35.47	TWO	1.266	44.8	0.0	14.3										
44910.0	45052.0	0.365	341.0	6.6	6.78	0.753	75.0	0.496	0.690	163.5	426.4	0.348	1.032	1.12	1.777	110.8	241.4	2.1	0.906
		7.68	24.70	32.38	TWO	1.266	44.8	0.0	16.7										
44920.0	45052.0	0.325	340.5	9.2	7.04	0.748	80.2	0.472	0.684	168.6	421.5	0.361	1.007	-0.11	1.774	108.7	243.7	-0.2	0.853
		6.89	23.13	30.02	TWO	1.266	44.8	0.0	19.0										
44930.0	45052.0	0.300	336.8	10.8	7.56	0.746	85.6	0.455	0.681	174.7	417.6	0.371	0.991	-1.49	1.772	107.2	245.6	-3.1	0.815
		6.39	22.03	28.42	TWO	1.266	44.8	0.0	21.0										
44940.0	45052.0	0.295	330.1	11.3	8.44	0.750	91.6	0.447	0.682	182.0	414.8	0.377	0.986A	-3.15	1.772	106.2	246.8	-6.8	0.795
		6.30	21.44	27.74	TWO	1.266	44.8	0.0	23.0										
44950.0	45052.0	0.319	322.5	10.6	9.91	0.761	98.2	0.448	0.689	190.3	413.2	0.380	0.998A	-5.33	1.776	105.8	247.3	-11.5	0.797
		6.76	21.48	28.24	TWO	1.266	44.8	0.0	25.2										
44960.0	45052.0	0.382	316.7	10.0	12.46	0.787	105.5	0.462	0.707	199.8	412.7	0.380	1.034A	-8.55	1.787	106.0	246.8	-17.9	0.829
		8.05	22.43	30.47	TWO	1.266	44.8	0.0	28.1										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2445354.0											
45210.0	45354.0	0.543	287.8	2.4	19.45	0.758	63.7	0.581	0.712	156.6	315.2	0.298D	1.125	-18.64	2.142	73.8	229.4	-36.5	1.107
		11.77	30.63	42.40	ONE	0.672	237.4	0.0	142.8										
45220.0	45354.0	0.496	296.0	-2.2	13.78	0.737	65.4	0.586	0.694	159.3	308.5	0.287D	1.100	-12.35	2.133	71.4	228.5	-23.9	1.067
		10.63	29.46	40.09	ONE	0.672	237.4	0.0	154.6										
45230.0	45354.0	0.470	302.6	-4.4	10.86	0.714	67.3	0.593	0.675	162.1	301.9	0.275D	1.076	-8.77	2.124	69.0	230.0	-16.0	1.096
		10.03	30.33	40.35	ONE	0.672	237.4	0.0	162.4										
45240.0	45354.0	0.452	308.0	-5.3	9.16	0.689	69.8	0.601	0.657	165.2	295.3	0.262D	1.053	-6.37	2.114	66.6	232.1	-10.8	1.149
		9.61	31.90	41.51	ONE	0.672	237.4	0.0	168.0										
45250.0	45354.0	0.438	312.1	-5.6	8.11	0.662	73.0	0.612	0.640	168.5	288.9	0.248D	1.031	-4.57	2.104	64.2	234.4	-7.1	1.212
		9.29	33.75	43.04	ONE	0.672	237.4	0.0	172.2										
45260.0	45354.0	0.428	314.6	-5.9	7.47	0.634	77.3	0.625	0.623	172.1	282.7	0.234D	1.012	-3.08	2.094	61.8	236.6	-4.5	1.278
		9.06	35.73	44.78	ONE	0.672	237.4	0.0	175.5										
45270.0	45354.0	0.424	315.1	-6.4	7.11	0.607	83.1	0.640	0.608	176.1	276.8	0.219D	0.998	-1.77	2.085	59.4	238.7	-2.4	1.347
		8.96	37.75	46.71	ONE	0.672	237.4	0.0	177.3										
45280.0	45354.0	0.431	313.4	-7.6	6.99	0.588	91.3	0.658	0.598	180.7	271.4	0.205D	0.991A	-0.54	2.078	57.1	240.6	-0.7	1.416
		9.13	39.80	48.93	ONE	0.672	237.4	0.0	176.7										
45290.0	45354.0	0.462	309.3	-9.4	7.08	0.587	102.3	0.679	0.596	186.0	266.8	0.191D	1.000A	0.69	2.077	54.8	242.3	0.8	1.486
		9.83	41.90	51.73	ONE	0.672	237.4	0.0	175.1										
45300.0	45354.0	0.534	303.8	-11.8	7.40	0.626	116.3	0.706	0.612	192.5	263.3	0.180D	1.044A	2.01	2.087	52.6	243.6	2.1	1.562
		11.55	44.14	55.69	ONE	0.672	237.4	0.0	173.5										
								ARRIVAL DATE = 2445356.0											
45220.0	45356.0	0.515	292.7	6.1	20.11	0.749	67.5	0.555	0.703	158.8	318.2	0.313D	1.092	-18.07	2.095	75.3	237.3	-36.3	1.063
		11.08	29.35	40.43	ONE	0.688	247.9	0.0	142.4										
45230.0	45356.0	0.458	300.6	1.2	14.04	0.729	69.7	0.558	0.686	161.8	311.9	0.303D	1.068	-11.39	2.087	73.2	236.3	-22.8	1.016
		9.74	27.96	37.70	ONE	0.688	247.9	0.0	154.5										
45240.0	45356.0	0.427	306.3	-1.3	10.97	0.708	72.3	0.563	0.669	165.0	305.6	0.292D	1.046	-7.67	2.078	71.0	237.8	-14.6	1.040
		9.04	28.67	37.71	ONE	0.688	247.9	0.0	162.3										
45250.0	45356.0	0.406	310.3	-2.6	9.21	0.686	75.6	0.571	0.653	168.6	299.4	0.280D	1.026	-5.21	2.069	68.8	239.8	-9.3	1.087
		8.58	30.04	38.62	ONE	0.688	247.9	0.0	167.7										
45260.0	45356.0	0.392	312.4	-3.6	8.12	0.664	79.9	0.580	0.638	172.5	293.5	0.268D	1.008	-3.37	2.060	66.7	241.9	-5.6	1.141
		8.25	31.65	39.90	ONE	0.688	247.9	0.0	171.8										
4527C.0	45356.0	0.384	312.4	-4.8	7.46	0.644	85.6	0.591	0.626	176.9	288.1	0.256D	0.996	-1.87	2.053	64.6	243.8	-2.9	1.198
		8.10	33.33	41.43	ONE	0.688	247.9	0.0	175.0										
45280.0	45356.0	0.390	309.8	-6.5	7.09	0.633	93.1	0.605	0.618	182.0	283.3	0.244D	0.992A	-0.55	2.048	62.7	245.6	-0.8	1.254
		8.23	35.02	43.24	ONE	0.688	247.9	0.0	177.6										
45290.0	45356.0	0.421	305.0	-9.0	6.96	0.639	103.0	0.623	0.619	188.1	279.4	0.234D	1.005A	0.69	2.049	60.8	247.0	0.9	1.311
		8.90	36.70	45.60	ONE	0.688	247.9	0.0	178.7										
45300.0	45356.0	0.494	299.0	-11.8	7.04	0.682	115.1	0.648	0.640	195.8	277.0	0.225D	1.055A	1.92	2.062	59.2	247.9	2.5	1.370
		10.58	38.43	49.01	ONE	0.688	247.9	0.0	177.5										
								ARRIVAL DATE = 2445358.0											
45230.0	45358.0	0.477	297.0	9.1	19.59	0.742	71.6	0.528	0.695	161.7	321.3	0.328D	1.062	-16.42	2.047	76.9	243.7	-34.5	0.995
		10.19	27.34	37.52	ONE	0.712	257.7	0.0	143.1										
45240.0	45358.0	0.416	303.8	4.0	13.60	0.724	74.4	0.530	0.680	165.1	315.4	0.320D	1.040	-9.84	2.040	74.9	243.0	-20.7	0.953
		8.80	26.08	34.88	ONE	0.712	257.7	0.0	154.8										
45250.0	45358.0	0.384	308.0	1.1	10.60	0.706	77.9	0.534	0.665	168.9	309.5	0.310D	1.021	-6.21	2.032	72.9	244.6	-12.4	0.975
		8.08	26.73	34.81	ONE	0.712	257.7	0.0	162.0										
45260.0	45358.0	0.363	309.9	-0.9	8.88	0.689	82.1	0.540	0.653	173.2	304.0	0.300D	1.005	-3.81	2.024	71.0	246.5	-7.2	1.015
		7.64	27.92	35.57	ONE	0.712	257.7	0.0	166.7										
45270.0	45358.0	0.353	309.2	-3.0	7.83	0.675	87.6	0.548	0.642	178.0	299.0	0.290D	0.994	-2.03	2.019	69.3	248.3	-3.6	1.061
		7.43	29.27	36.70	ONE	0.712	257.7	0.0	170.0										
45280.0	45358.0	0.358	305.8	-5.5	7.19	0.670	94.7	0.559	0.638	183.7	294.8	0.281D	0.994A	-0.58	2.016	67.7	249.9	-1.0	1.106
		7.55	30.63	38.18	ONE	0.712	257.7	0.0	172.2										
45290.0	45358.0	0.390	300.3	-8.6	6.84	0.683	103.7	0.574	0.643	190.6	291.7	0.274D	1.012A	0.70	2.019	66.2	251.1	1.1	1.151
		8.23	31.95	40.18	ONE	0.712	257.7	0.0	173.3										
45300.0	45358.0	0.465	294.2	-11.8	6.71	0.730	114.5	0.599	0.669	199.3	290.4	0.269D	1.070A	1.90	2.034	65.1	251.5	2.9	1.195
		9.91	33.25	43.17	ONE	0.712	257.7	0.0	173.1										
								ARRIVAL DATE = 2445360.0											
45230.0	45360.0	0.593	290.0	18.9	32.35	0.754	73.2	0.502	0.703	161.7	329.9	0.350D	1.056	-28.72	2.008	80.0	260.8	-54.1	1.174
		13.02	32.63	45.65	ONE	0.740	266.9	0.0	125.7										
45240.0	45360.0	0.431	300.2	11.1	18.03	0.738	76.2	0.501	0.689	165.4	324.6	0.344D	1.035	-13.86	2.001	78.4	248.8	-31.1	0.910
		9.13	24.81	33.94	ONE	0.740	266.9	0.0	144.5										
45250.0	45360.0	0.373	305.2	5.8	12.57	0.723	79.7	0.502	0.677	169.5	319.2	0.337D	1.016	-7.83	1.994	76.6	248.8	-17.5	0.881
		7.85	23.96	31.80	ONE	0.740	266.9	0.0	155.0										
45260.0	45360.0	0.342	306.9	2.2	9.83	0.710	84.0	0.505	0.666	174.1	314.1	0.329D	1.002	-4.49	1.988	75.0	250.4	-9.6	0.902
		7.22	24.59	31.81	ONE	0.740	266.9	0.0	160.9										
45270.0	45360.0	0.329	305.7	-1.0	8.26	0.702	89.4	0.511	0.658	179.4	309.6	0.322D	0.994	-2.28	1.983	73.5	252.1	-4.6	0.936
		6.95	25.60	32.55	ONE	0.740	266.9	0.0	164.5										
45280.0	45360.0	0.334	301.6	-4.5	7.30	0.702	96.1	0.520	0.656	185.7	305.9	0.315D	0.996A	-0.62	1.982	72.1	253.5	-1.2	0.972
		7.06	26.66	33.72	ONE	0.740	266.9	0.0	166.5										
45290.0	45360.0	0.369	295.6	-8.4	6.72	0.720	104.4	0.534	0.665	193.3	303.6	0.310D	1.019A	0.73	1.987	71.1	254.3	1.4	1.007
		7.76	27.67	35.44	ONE	0.740	266.9	0.0	167.3										
45300.0	45360.0	0.447	285.7	-12.0	6.40	0.769	114.3	0.559	0.697	203.0	303.3	0.307D	1.087A	1.93	2.005	70.3	254.3	3.5	1.039
		9.48	28.63	38.11	ONE	0.740	266.9	0.0	166.9										
45310.0	45360.0	0.587	285.6	-14.9	6.30	0.876	125.1	0.609	0.792	215.7	305.9	0.309D	1.274A	3.05	2.047	70.0	252.8	5.5	1.074
		12.85	29.67	42.53	ONE	0.740	266.9	0.0	164.9										
								ARRIVAL DATE = 2445362.0											
4521C.0	45362.0	0.462	297.4	-51.5	-18.03	0.789	70.1	0.487	0.737	155.6	354.5	0.378D	1.096	21.10	1.982	88.2	244.6	56.9	0.851
		9.82	23.08	32.90	TWO	0.773	275.6	0.0	117.9										
45240.0	45362.0	0.518	294.2	20.1	27.60	0.750	77.7	0.477	0.698	165.7	333.2	0.365D	1.031	-23.05	1.963	81.4	259.9	-49.3	1.002
		11.15	27.55	38.70	ONE	0.773	275.6	0.0	128.9										
45250.0	45362.0	0.381	301.7	11.9	15.75	0.738	81.3	0.475	0.687	170.1	328.4	0.360D	1.013	-10.70	1.957	79.9	252.8	-25.9	0.817
		8.02	22.09	30.11	ONE	0.773	275.6	0.0	146.0										
45260.0	45362.0	0.331	303.8	5.9	11.13	0.728	85.5	0.476	0.677	175.1	323.7	0.355D	1.000	-5.55	1.952	78.5	253.5	-13.3	0.805
		7.00	21.71	28.71	ONE	0.773	275.6	0.0	154.4										
45270.0	45362.0	0.312	302.1	1.1	8.78	0.723	90.8	0.480	0.671	180.8	319.7	0.349D	0.994A	-2.65	1.949	77.2	255.0	-6.1	0.825
		6.62	22.32	28.94	ONE	0.773	275.6	0.0	158.6										
45280.0	45362.0	0.317	297.4	-3.6	7.42	0.728	97.2	0.487	0.672	187.7	316.6	0.344D	1.000A	-0.69	1.949	76.1	256.2	-1.5	0.852
		6.72	23.12	29.83	ONE	0.773	275.6	0.0	160.6										
45290.0	45362.0	0.354	291.2	-8.3	6.59	0.750	105.0	0.501	0.685	196.1	315.0	0.341D	1.028A	0.78	1.956	75.3	256.8	1.7	0.878
		7.45	23.88	31.33	ONE	0.773	275.6	0.0	161.1										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45300.0	45362.0	0.434	285.7	-12.3	6.09	0.802	114.2	0.528	0.722	206.6	315.6	0.341D	1.104A	2.00	1.976	75.0	256.3	4.2	0.902
		9.20	24.57	33.77	ONE	0.773	275.6	0.0	160.3										
45310.0	45362.0	0.574	282.3	-15.3	5.83	0.906	124.2	0.584	0.827	220.1	318.9	0.344D	1.310A	3.09	2.019	75.1	254.0	6.5	0.927
		12.55	25.32	37.87	ONE	0.773	275.6	0.0	157.5										
ARRIVAL DATE = 2445364.0																			
45210.0	45364.0	0.402	297.8	-43.3	-11.51	0.794	70.9	0.474	0.741	155.5	362.2	0.360	1.092	15.08	1.945	90.7	237.7	49.1	0.669
		8.48	17.73	26.21	TWO	0.807	283.7	0.0	117.0										
45220.0	45364.0	0.430	305.6	-52.1	-17.55	0.782	73.4	0.465	0.728	158.8	356.0	0.389D	1.067	21.56	1.939	88.7	250.7	58.2	0.838
		9.10	22.70	31.80	TWO	0.807	283.7	0.0	116.2										
45250.0	45364.0	0.434	296.9	19.8	22.07	0.750	82.5	0.453	0.695	170.8	337.0	0.380D	1.010	-16.73	1.922	82.9	258.8	-41.3	0.832
		9.19	22.52	31.71	ONE	0.807	283.7	0.0	132.9										
45260.0	45364.0	0.333	300.4	10.6	13.12	0.743	86.8	0.452	0.687	176.1	332.8	0.376D	0.998	-7.32	1.918	81.6	256.0	-19.4	0.728
		7.03	19.45	26.47	ONE	0.807	283.7	0.0	146.6										
45270.0	45364.0	0.301	298.6	3.5	9.46	0.741	91.9	0.455	0.684	182.3	329.3	0.373D	0.994A	-3.19	1.915	80.5	257.0	-8.3	0.728
		6.42	19.46	25.89	ONE	0.807	283.7	0.0	152.1										
45280.0	45364.0	0.305	293.6	-2.7	7.56	0.749	98.1	0.462	0.686	189.7	326.8	0.370D	1.003A	-0.79	1.917	79.7	258.0	-2.0	0.746
		6.49	20.00	26.48	ONE	0.807	283.7	0.0	154.2										
45290.0	45364.0	0.344	287.4	-8.3	6.45	0.774	105.5	0.476	0.702	198.7	325.8	0.368D	1.036A	0.86	1.926	79.1	258.3	2.1	0.766
		7.25	20.56	27.81	ONE	0.807	283.7	0.0	154.5										
45300.0	45364.0	0.427	282.4	-12.7	5.78	0.827	114.1	0.505	0.745	209.9	327.0	0.369D	1.121A	2.13	1.947	79.1	257.2	5.2	0.783
		9.03	21.06	30.09	ONE	0.807	283.7	0.0	153.0										
45310.0	45364.0	0.566	279.7	-15.8	5.38	0.930	123.6	0.567	0.858	223.8	330.8	0.372D	1.344A	3.19	1.992	79.5	254.1	7.8	0.802
		12.35	21.63	33.98	ONE	0.807	283.7	0.0	149.4										
ARRIVAL DATE = 2445366.0																			
45210.0	45366.0	0.373	297.5	-37.6	-7.96	0.798	71.6	0.464	0.744	155.4	369.6	0.399	1.089	12.01	1.909	93.0	233.1	44.3	0.568
		7.86	14.77	22.63	TWO	0.843	291.4	0.0	112.1										
45220.0	45366.0	0.367	304.9	-42.9	-10.77	0.787	74.2	0.453	0.732	158.8	363.4	0.401	1.064	15.22	1.904	91.1	242.7	49.7	0.655
		7.72	17.30	25.03	TWO	0.843	291.4	0.0	115.3										
45230.0	45366.0	0.402	312.3	-53.4	-17.32	0.777	77.0	0.444	0.721	162.6	357.7	0.401D	1.042	22.16	1.898	89.3	256.1	60.0	0.827
		8.47	22.37	30.84	TWO	0.843	291.4	0.0	114.1										
45260.0	45366.0	0.358	296.7	16.9	16.73	0.755	87.8	0.433	0.696	177.1	341.4	0.394D	0.997	-10.74	1.885	84.4	258.4	-30.5	0.689
		7.54	18.32	25.86	ONE	0.843	291.4	0.0	136.3										
45270.0	45366.0	0.298	295.4	6.4	10.46	0.756	92.8	0.435	0.694	183.7	338.3	0.392D	0.995A	-4.07	1.884	83.5	258.0	-11.9	0.646
		6.36	17.06	23.42	ONE	0.843	291.4	0.0	144.8										
45280.0	45366.0	0.297	290.3	-1.8	7.75	0.766	98.9	0.441	0.699	191.6	336.3	0.390D	1.007A	-0.93	1.887	82.8	258.8	-2.7	0.654
		6.34	17.29	23.63	ONE	0.843	291.4	0.0	147.3										
45290.0	45366.0	0.337	284.2	-8.4	6.29	0.793	106.0	0.456	0.717	201.1	335.9	0.390D	1.044A	0.97	1.896	82.5	258.7	2.7	0.668
		7.12	17.71	24.82	ONE	0.843	291.4	0.0	147.2										
45300.0	45366.0	0.422	279.7	-13.1	5.43	0.847	114.1	0.488	0.764	212.8	337.5	0.391D	1.137A	2.31	1.918	82.7	257.1	6.4	0.682
		8.91	18.10	27.01	ONE	0.843	291.4	0.0	145.2										
45310.0	45366.0	0.560	277.8	-16.3	4.91	0.947	123.1	0.554	0.883	226.8	341.4	0.393D	1.372A	3.36	1.964	83.4	253.0	9.4	0.699
		12.20	18.60	30.79	ONE	0.843	291.4	0.0	140.6										
ARRIVAL DATE = 2445368.0																			
45210.0	45368.0	0.357	297.0	-33.5	-5.67	0.800	72.0	0.456	0.746	155.4	376.7	0.406	1.087	10.19	1.877	95.2	228.0	41.0	0.504
		7.52	12.92	20.45	TWO	0.879	298.7	0.0	104.5										
45220.0	45368.0	0.338	303.8	-36.5	-7.14	0.791	74.7	0.444	0.736	158.8	370.5	0.409	1.062	12.01	1.872	93.2	237.5	44.4	0.555
		7.14	14.40	21.54	TWO	0.879	298.7	0.0	110.1										
45230.0	45368.0	0.332	310.1	-42.8	-10.01	0.782	77.6	0.433	0.725	162.7	364.8	0.411	1.040	15.22	1.866	91.4	246.6	50.4	0.636
		7.02	16.76	23.77	TWO	0.879	298.7	0.0	113.1										
45240.0	45368.0	0.380	317.0	-55.7	-17.51	0.774	80.9	0.425	0.716	167.2	359.7	0.411D	1.021	23.05	1.862	89.9	260.8	62.5	0.821
		8.01	22.20	30.21	TWO	0.879	298.7	0.0	111.3										
45260.0	45368.0	0.460	292.5	25.2	25.79	0.765	88.5	0.418	0.703	177.9	349.3	0.409D	0.997	-19.61	1.855	86.9	265.1	-52.5	0.784
		9.78	21.10	30.88	ONE	0.879	298.7	0.0	120.5										
45270.0	45368.0	0.305	292.6	10.4	12.12	0.767	93.5	0.419	0.702	184.9	346.8	0.408D	0.996A	-5.61	1.854	86.1	258.1	-18.0	0.584
		6.50	15.23	21.73	ONE	0.879	298.7	0.0	136.2										
45280.0	45368.0	0.292	287.5	-0.9	8.00	0.779	99.4	0.426	0.709	193.2	345.2	0.407D	1.011A	-1.15	1.858	85.6	258.4	-3.7	0.576
		6.26	15.01	21.27	ONE	0.879	298.7	0.0	139.6										
45290.0	45368.0	0.332	281.7	-8.6	6.09	0.807	106.3	0.442	0.729	203.1	345.2	0.407D	1.052A	1.12	1.869	85.5	258.0	3.5	0.587
		7.02	15.32	22.34	ONE	0.879	298.7	0.0	139.2										
45300.0	45368.0	0.417	277.7	-13.7	5.04	0.862	114.1	0.476	0.779	215.0	347.0	0.408D	1.149A	2.55	1.892	85.8	255.7	8.1	0.599
		8.82	15.68	24.50	ONE	0.879	298.7	0.0	136.4										
45310.0	45368.0	0.555	276.4	-16.9	4.41	0.959	122.7	0.545	0.901	229.0	350.9	0.409D	1.392A	3.59	1.937	86.8	250.6	11.3	0.617
		12.06	16.20	28.26	ONE	0.879	298.7	0.0	131.0										
ARRIVAL DATE = 2445370.0																			
45210.0	45370.0	0.348	296.7	-30.2	-4.03	0.802	72.2	0.452	0.748	155.3	383.4	0.410	1.086	9.02	1.847	97.2	222.2	38.1	0.466
		7.34	11.81	19.15	TWO	0.914	305.6	0.0	95.2										
45220.0	45370.0	0.323	302.9	-31.8	-4.83	0.794	75.1	0.437	0.738	158.8	377.3	0.415	1.061	10.11	1.842	95.2	232.1	40.6	0.495
		6.84	12.65	19.49	TWO	0.914	305.6	0.0	102.4										
45230.0	45370.0	0.304	308.2	-35.3	-6.24	0.786	78.1	0.425	0.728	162.8	371.6	0.419	1.038	11.81	1.837	93.5	240.7	44.2	0.538
		6.47	13.91	20.37	TWO	0.914	305.6	0.0	107.7										
45240.0	45370.0	0.299	312.9	-43.0	-9.21	0.779	81.3	0.416	0.720	167.5	366.5	0.420	1.019	15.04	1.833	91.9	249.0	50.8	0.613
		6.39	16.09	22.48	TWO	0.914	305.6	0.0	110.3										
45250.0	45370.0	0.373	319.1	-59.2	-18.49	0.774	85.1	0.409	0.713	172.8	362.3	0.421	1.005	24.58	1.829	90.7	264.9	66.3	0.831
		7.86	22.49	30.35	TWO	0.914	305.6	0.0	107.7										
45270.0	45370.0	0.336	290.1	16.6	15.59	0.776	94.1	0.407	0.709	186.0	354.7	0.421D	0.997A	-8.97	1.827	88.5	257.6	-30.5	0.560
		7.09	14.55	21.64	ONE	0.914	305.6	0.0	125.2										
45280.0	45370.0	0.291	285.4	0.4	8.38	0.789	99.8	0.414	0.717	194.5	353.5	0.420D	1.013A	-1.50	1.831	88.1	256.7	-5.4	0.512
		6.23	13.15	19.38	ONE	0.914	305.6	0.0	130.9										
45290.0	45370.0	0.328	279.8	-9.1	5.83	0.818	106.5	0.431	0.739	204.7	353.7	0.420D	1.057A	1.33	1.843	88.1	256.0	4.7	0.521
		6.94	13.39	20.34	ONE	0.914	305.6	0.0	130.2										
45300.0	45370.0	0.414	276.2	-14.5	4.57	0.872	114.0	0.467	0.789	216.7	355.6	0.421D	1.158A	2.88	1.866	88.6	253.1	10.1	0.534
		8.73	13.79	22.52	ONE	0.914	305.6	0.0	126.8										
45310.0	45370.0	0.549	275.4	-17.6	3.85	0.966	122.3	0.538	0.912	230.5	359.3	0.421D	1.403A	3.92	1.911	89.8	247.1	13.6	0.556
		11.91	14.43	26.34	ONE	0.914	305.6	0.0	120.5										
ARRIVAL DATE = 2445372.0																			
45210.0	45372.0	0.344	296.4	-27.5	-2.76	0.804	72.3	0.450	0.749	155.2	389.8	0.413	1.086	8.23	1.821	99.1	216.1	35.1	0.447
		7.26	11.27	18.53	TWO	0.949	312.2	0.0	85.0										
45220.0	45372.0	0.315	302.3	-28.1	-3.19	0.796	75.2	0.433	0.740	158.7	383.7	0.419	1.060	8.89	1.816	97.1	226.2	37.3	0.460
		6.69	11.63	18.32	TWO	0.949	312.2	0.0	93.1										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45230.0	45372.0	0.290	306.9	-29.9	-3.90	0.788	78.3	0.420	0.731	162.8	378.1	0.424	1.037	9.82	1.811	95.3	235.0	39.7	0.482
		6.21	12.26	18.48	TWO	0.949	312.2	0.0	99.8										
45240.0	45372.0	0.271	310.1	-34.0	-5.23	0.782	81.7	0.409	0.723	167.6	373.1	0.427	1.018	11.35	1.807	93.8	242.5	43.4	0.517
		5.87	13.28	19.15	TWO	0.949	312.2	0.0	104.6										
45250.0	45372.0	0.270	312.1	-43.3	-8.32	0.778	85.4	0.402	0.716	173.1	368.8	0.429	1.004	14.64	1.804	92.5	249.7	50.9	0.587
		5.86	15.31	21.18	TWO	0.949	312.2	0.0	106.9										
45260.0	45372.0	0.401	318.9	-64.3	-21.57	0.778	89.7	0.398	0.713	179.5	365.6	0.430	0.997	28.09	1.802	91.6	271.2	72.7	0.888
		8.45	24.18	32.64	TWO	0.949	312.2	0.0	103.0										
45270.0	45372.0	0.486	288.6	27.0	27.99	0.783	94.4	0.398	0.714	186.7	361.9	0.430	0.998A	-21.28	1.802	90.5	263.7	-61.7	0.743
		10.41	19.90	30.30	ONE	0.949	312.2	0.0	108.3										
45280.0	45372.0	0.293	284.0	2.3	9.08	0.797	100.1	0.405	0.723	195.5	361.1	0.430	1.016A	-2.16	1.807	90.3	253.9	-8.5	0.464
		6.27	11.74	18.01	ONE	0.949	312.2	0.0	121.2										
45290.0	45372.0	0.324	278.5	-9.8	5.46	0.825	106.6	0.423	0.746	205.8	361.4	0.430	1.061A	1.66	1.819	90.4	252.7	6.4	0.470
		6.86	11.93	18.80	ONE	0.949	312.2	0.0	120.3										
45300.0	45372.0	0.409	275.3	-15.5	3.98	0.878	113.9	0.460	0.797	217.8	363.3	0.430	1.163A	3.35	1.842	91.0	249.3	12.8	0.488
		8.63	12.44	21.07	ONE	0.949	312.2	0.0	116.4										
45310.0	45372.0	0.542	274.9	-18.5	3.21	0.969	121.9	0.532	0.917	231.3	366.7	0.429	1.405A	4.35	1.887	92.3	242.7	16.1	0.516
		11.74	13.25	24.99	ONE	0.949	312.2	0.0	109.6										

ARRIVAL DATE = 2445374.0

45210.0	45374.0	0.344	296.3	-25.1	-1.72	0.804	72.2	0.450	0.750	155.0	395.9	0.412	1.088	7.68	1.797	101.0	210.4	31.9	0.446
		7.26	11.23	18.49	TWO	0.983	318.6	0.0	74.6										
45220.0	45374.0	0.313	301.9	-25.1	-1.93	0.797	75.2	0.432	0.741	158.6	389.9	0.421	1.061	8.05	1.792	98.9	220.2	33.9	0.444
		6.64	11.18	17.81	TWO	0.983	318.6	0.0	83.1										
45230.0	45374.0	0.284	306.1	-25.7	-2.27	0.790	78.4	0.417	0.732	162.7	384.3	0.427	1.037	8.54	1.788	97.1	229.0	35.8	0.451
		6.10	11.37	17.47	TWO	0.983	318.6	0.0	90.3										
45240.0	45374.0	0.259	308.4	-27.6	-2.86	0.785	81.8	0.405	0.725	167.6	379.4	0.431	1.018	9.27	1.784	95.6	236.5	37.9	0.465
		5.67	11.79	17.46	TWO	0.983	318.6	0.0	96.2										
45250.0	45374.0	0.243	308.4	-32.2	-4.02	0.781	85.6	0.396	0.719	173.2	375.2	0.434	1.004	10.57	1.781	94.3	242.8	41.5	0.492
		5.39	12.55	17.94	TWO	0.983	318.6	0.0	100.6										
45260.0	45374.0	0.249	306.6	-43.0	-7.18	0.781	89.8	0.392	0.716	179.7	371.8	0.436	0.996	13.86	1.779	93.3	248.3	50.1	0.555
		5.50	14.40	19.90	TWO	0.983	318.6	0.0	102.5										
45270.0	45374.0	0.593	322.5	-69.6	-35.89	0.787	94.7	0.392	0.718	187.3	369.9	0.436	0.999A	42.71	1.780	92.8	349.6	82.5	1.217
		13.01	33.89	46.90	TWO	0.983	318.6	0.0	96.5										
45280.0	45374.0	0.304	283.2	6.3	10.78	0.801	100.1	0.399	0.727	196.1	368.0	0.437	1.017A	-3.84	1.785	92.3	249.9	-15.9	0.436
		6.48	10.95	17.43	ONE	0.983	318.6	0.0	110.5										
45290.0	45374.0	0.319	277.8	-11.0	4.86	0.830	106.5	0.417	0.750	206.4	368.4	0.437	1.063A	2.22	1.797	92.5	248.4	9.2	0.436
		6.77	10.95	17.72	ONE	0.983	318.6	0.0	109.6										
45300.0	45374.0	0.404	274.9	-17.0	3.19	0.881	113.7	0.455	0.800	218.3	370.2	0.436	1.164A	4.02	1.820	93.2	244.7	16.1	0.459
		8.51	11.62	20.13	ONE	0.983	318.6	0.0	105.5										
45310.0	45374.0	0.534	274.8	-19.6	2.43	0.969	121.5	0.526	0.916	231.5	373.3	0.434	1.399A	4.93	1.863	94.6	237.8	18.9	0.494
		11.55	12.62	24.16	ONE	0.983	318.6	0.0	98.7										

ARRIVAL DATE = 2445376.0

45210.0	45376.0	0.347	296.3	-23.1	-0.83	0.805	71.8	0.453	0.750	154.7	401.8	0.410	1.090	7.29	1.777	102.7	205.6	28.6	0.459
		7.33	11.62	18.94	TWO	1.015	324.7	0.0	64.7										
45220.0	45376.0	0.314	301.7	-22.5	-0.91	0.797	75.0	0.433	0.741	158.3	395.7	0.420	1.062	7.45	1.772	100.6	214.8	30.5	0.445
		6.66	11.21	17.86	TWO	1.015	324.7	0.0	72.9										
45230.0	45376.0	0.283	305.6	-22.3	-1.04	0.791	78.3	0.416	0.733	162.5	390.2	0.428	1.038	7.66	1.768	98.8	223.3	32.0	0.439
		6.08	11.04	17.12	TWO	1.015	324.7	0.0	80.3										
45240.0	45376.0	0.255	307.5	-22.9	-1.25	0.786	81.8	0.403	0.726	167.4	385.3	0.433	1.018	7.95	1.764	97.2	230.7	33.4	0.440
		5.61	11.06	16.67	TWO	1.015	324.7	0.0	86.6										
45250.0	45376.0	0.234	306.6	-24.8	-1.63	0.783	85.6	0.393	0.721	173.1	381.2	0.437	1.004	8.40	1.761	95.9	236.8	34.9	0.447
		5.26	11.26	16.52	TWO	1.015	324.7	0.0	91.7										
45260.0	45376.0	0.224	302.5	-28.9	-2.46	0.784	89.8	0.388	0.718	179.7	377.9	0.440	0.996	9.30	1.760	95.0	241.4	37.7	0.463
		5.09	11.72	16.81	TWO	1.015	324.7	0.0	95.3										
45270.0	45376.0	0.239	296.5	-39.4	-5.37	0.790	94.6	0.388	0.720	187.4	375.6	0.441	0.999A	12.27	1.761	94.3	244.8	46.5	0.515
		5.34	13.22	18.56	TWO	1.015	324.7	0.0	96.9										
45280.0	45376.0	0.433	284.5	22.5	22.75	0.804	100.1	0.394	0.729	196.3	374.3	0.442	1.017A	-15.78	1.766	94.0	246.9	-55.0	0.585
		9.17	15.27	24.43	ONE	1.015	324.7	0.0	97.0										
45290.0	45376.0	0.313	277.7	-13.7	3.71	0.832	106.3	0.413	0.752	206.6	374.7	0.441	1.062A	3.33	1.777	94.3	243.5	14.2	0.420
		6.64	10.50	17.14	ONE	1.015	324.7	0.0	98.5										
45300.0	45376.0	0.397	274.9	-19.2	2.04	0.882	113.4	0.450	0.801	218.3	376.3	0.440	1.161A	5.07	1.800	95.1	239.7	20.6	0.450
		8.37	11.34	19.71	ONE	1.015	324.7	0.0	94.6										
45310.0	45376.0	0.525	275.1	-21.1	1.44	0.965	121.0	0.520	0.911	231.2	379.1	0.437	1.384A	5.74	1.841	96.5	233.0	22.0	0.490
		11.32	12.49	23.81	ONE	1.015	324.7	0.0	88.4										

ARRIVAL DATE = 2445378.0

45210.0	45378.0	0.354	296.4	-21.3	-0.04	0.804	71.3	0.459	0.750	154.4	407.4	0.406	1.094	7.02	1.759	104.4	202.1	25.4	0.485
		7.46	12.37	19.83	TWO	1.047	330.7	0.0	55.7										
45220.0	45378.0	0.318	301.8	-20.4	-0.05	0.797	74.6	0.436	0.741	158.0	401.3	0.418	1.065	7.02	1.754	102.2	210.4	27.1	0.460
		6.74	11.65	18.39	TWO	1.047	330.7	0.0	63.4										
45230.0	45378.0	0.285	305.5	-19.6	-0.05	0.791	78.0	0.418	0.733	162.2	395.8	0.427	1.040	7.03	1.750	100.3	218.3	28.4	0.444
		6.13	11.17	17.30	TWO	1.047	330.7	0.0	70.4										
45240.0	45378.0	0.256	307.1	-19.3	-0.06	0.787	81.6	0.403	0.726	167.1	390.9	0.433	1.019	7.05	1.747	98.8	225.3	29.2	0.434
		5.62	10.89	16.51	TWO	1.047	330.7	0.0	76.6										
45250.0	45378.0	0.233	305.9	-19.6	-0.07	0.784	85.4	0.393	0.721	172.9	386.8	0.438	1.004	7.06	1.744	97.5	231.2	29.7	0.429
		5.24	10.76	16.00	TWO	1.047	330.7	0.0	81.8										
45260.0	45378.0	0.220	301.1	-20.7	-0.10	0.785	89.7	0.386	0.719	179.5	383.6	0.441	0.997	7.09	1.743	96.5	235.8	29.9	0.429
		5.03	10.74	15.77	TWO	1.047	330.7	0.0	85.7										
45270.0	45378.0	0.223	293.3	-22.3	-0.17	0.791	94.5	0.385	0.721	187.2	381.3	0.443	0.999A	7.16	1.744	95.9	238.7	30.1	0.431
		5.08	10.82	15.89	TWO	1.047	330.7	0.0	88.2										
45280.0	45378.0	0.249	284.9	-24.5	-0.56	0.805	99.9	0.392	0.730	196.1	380.2	0.444	1.016A	7.57	1.749	95.7	239.6	31.3	0.441
		5.50	11.10	16.60	TWO	1.047	330.7	0.0	89.1										
45290.0	45378.0	0.303	278.3	-22.2	0.39	0.832	106.1	0.410	0.752	206.4	380.4	0.443	1.060A	6.62	1.760	95.9	238.4	27.3	0.440
		6.46	11.07	17.54	ONE	1.047	330.7	0.0	88.0										
45300.0	45378.0	0.390	275.4	-23.0	0.15	0.880	113.0	0.447	0.798	217.9	381.8	0.442	1.155A	6.86	1.782	96.7	234.8	27.2	0.462
		8.22	11.71	19.93	ONE	1.047	330.7	0.0	84.7										
45310.0	45378.0	0.515	275.7	-23.2	0.09	0.959	120.5	0.514	0.901	230.5	384.3	0.438	1.364A	6.92	1.821	98.2	228.6	25.7	0.501
		11.08	12.83	23.91	ONE	1.047	330.7	0.0	79.1										

ARRIVAL DATE = 2445380.0

45210.0	45380.0	0.364	296.6	-19.8	0.68	0.803	70.6	0.467	0.749	154.0	412.8	0.399	1.099	6.84	1.744	106.2	199.8	22.5	0.522
		7.67	13.44	21.11	TWO	1.076	336.5	0.0	47.7										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45220.0	45380.0	0.325	302.0	-18.5	0.71	0.797	74.1	0.442	0.741	157.5	406.6	0.413	1.068	6.72	1.740	103.9	207.3	23.9	0.487
		6.89	12.43	19.32	TWO	1.076	336.5	0.0	54.7										
45230.0	45380.0	0.291	305.7	-17.3	0.78	0.791	77.6	0.422	0.733	161.7	401.1	0.424	1.042	6.58	1.736	101.9	214.4	24.9	0.462
		6.23	11.69	17.92	TWO	1.076	336.5	0.0	61.2										
45240.0	45380.0	0.260	307.2	-16.3	0.88	0.786	81.2	0.406	0.726	166.7	396.2	0.431	1.021	6.40	1.732	100.2	220.9	25.4	0.443
		5.68	11.16	16.84	TWO	1.076	336.5	0.0	67.0										
45250.0	45380.0	0.235	305.9	-15.8	1.04	0.784	85.1	0.394	0.721	172.4	392.1	0.437	1.005	6.17	1.729	98.9	226.5	25.2	0.431
		5.28	10.79	16.07	TWO	1.076	336.5	0.0	71.9										
45260.0	45380.0	0.221	301.1	-15.5	1.34	0.785	89.4	0.386	0.719	179.0	388.9	0.441	0.997	5.81	1.728	97.9	230.8	24.3	0.422
		5.05	10.54	15.59	TWO	1.076	336.5	0.0	75.7										
45270.0	45380.0	0.224	293.2	-14.7	1.96	0.791	94.2	0.385	0.721	186.7	386.6	0.443	0.998A	5.13	1.729	97.3	233.7	21.7	0.415
		5.09	10.33	15.43	TWO	1.076	336.5	0.0	78.1										
45280.0	45380.0	0.254	284.6	-10.5	3.89	0.804	99.6	0.391	0.729	195.6	385.5	0.444	1.015A	3.14	1.734	97.1	234.9	13.5	0.405
		5.58	10.05	15.63	TWO	1.076	336.5	0.0	78.7										
45300.0	45380.0	0.388	276.9	-31.1	-3.73	0.876	112.5	0.443	0.794	217.1	386.8	0.442	1.146A	10.64	1.766	98.1	229.8	38.8	0.516
		8.17	13.25	21.41	ONE	1.076	336.5	0.0	77.1										
45310.0	45380.0	0.505	276.7	-26.4	-1.91	0.951	119.9	0.507	0.889	229.4	388.9	0.438	1.340A	8.76	1.803	99.7	224.9	30.7	0.531
		10.84	13.68	24.52	ONE	1.076	336.5	0.0	71.6										
ARRIVAL DATE = 2445382.0																			
45210.0	45382.0	0.377	296.9	-18.4	1.36	0.802	69.7	0.478	0.748	153.7	418.1	0.391	1.106	6.74	1.733	107.9	198.5	19.9	0.568
		7.94	14.77	22.72	TWO	1.105	342.2	0.0	40.7										
45220.0	45382.0	0.336	302.3	-16.9	1.40	0.796	73.3	0.451	0.740	157.1	411.8	0.406	1.073	6.50	1.728	105.5	205.2	21.1	0.525
		7.09	13.51	20.60	TWO	1.105	342.2	0.0	47.0										
45230.0	45382.0	0.299	306.1	-15.3	1.49	0.790	76.9	0.428	0.732	161.2	406.2	0.418	1.045	6.24	1.724	103.4	211.7	21.8	0.491
		6.38	12.53	18.91	TWO	1.105	342.2	0.0	52.9										
45240.0	45382.0	0.266	307.8	-14.0	1.65	0.785	80.7	0.410	0.725	166.0	401.3	0.428	1.023	5.93	1.720	101.7	217.6	22.0	0.465
		5.79	11.79	17.58	TWO	1.105	342.2	0.0	58.2										
45250.0	45382.0	0.240	306.5	-12.8	1.90	0.783	84.6	0.397	0.720	171.7	397.1	0.434	1.006	5.54	1.718	100.3	222.7	21.4	0.446
		5.36	11.23	16.59	TWO	1.105	342.2	0.0	62.7										
45260.0	45382.0	0.225	301.9	-11.9	2.33	0.784	88.9	0.388	0.718	178.3	393.8	0.439	0.997	4.97	1.716	99.3	226.8	19.9	0.431
		5.11	10.82	15.93	TWO	1.105	342.2	0.0	66.3										
45270.0	45382.0	0.227	294.2	-10.5	3.14	0.789	93.7	0.386	0.720	186.0	391.5	0.442	0.997A	4.04	1.717	98.6	229.7	16.5	0.421
		5.14	10.51	15.66	TWO	1.105	342.2	0.0	68.5										
45280.0	45382.0	0.257	285.8	-6.8	5.05	0.802	99.1	0.391	0.728	194.8	390.3	0.443	1.012A	2.01	1.722	98.4	231.0	8.3	0.414
		5.62	10.30	15.93	TWO	1.105	342.2	0.0	69.0										
45290.0	45382.0	0.367	281.0	8.7	13.95	0.827	105.2	0.407	0.747	204.8	390.4	0.443	1.051A	-7.02	1.732	98.7	229.6	-27.0	0.460
		7.72	11.65	19.37	TWO	1.105	342.2	0.0	69.9										
45300.0	45382.0	0.454	285.7	-52.8	-16.30	0.870	111.8	0.440	0.787	215.9	391.0	0.441	1.134A	23.12	1.752	99.4	218.2	64.4	0.752
		9.65	20.17	29.82	ONE	1.105	342.2	0.0	76.0										
45310.0	45382.0	0.499	278.6	-32.0	-5.30	0.941	119.2	0.501	0.874	227.9	393.1	0.436	1.311A	11.99	1.787	100.9	221.5	38.4	0.587
		10.69	15.33	26.02	ONE	1.105	342.2	0.0	66.4										
ARRIVAL DATE = 2445384.0																			
45210.0	45384.0	0.394	297.2	-17.2	2.02	0.801	68.5	0.492	0.747	153.3	423.3	0.380	1.114	6.71	1.724	109.8	198.1	17.7	0.622
		8.30	16.36	24.65	TWO	1.132	347.8	0.0	34.7										
45220.0	45384.0	0.349	302.8	-15.5	2.05	0.794	72.3	0.461	0.738	156.5	416.8	0.398	1.079	6.36	1.719	107.1	204.2	18.6	0.570
		7.37	14.84	22.21	TWO	1.132	347.8	0.0	40.3										
45230.0	45384.0	0.310	306.8	-13.7	2.14	0.788	76.1	0.437	0.731	160.5	411.1	0.412	1.050	6.00	1.715	104.9	210.0	19.1	0.529
		6.59	13.64	20.23	TWO	1.132	347.8	0.0	45.6										
45240.0	45384.0	0.275	308.6	-12.0	2.31	0.784	79.9	0.417	0.724	165.3	406.1	0.422	1.026	5.58	1.711	103.1	215.4	19.0	0.497
		5.95	12.70	18.66	TWO	1.132	347.8	0.0	50.4										
45250.0	45384.0	0.248	307.6	-10.5	2.60	0.781	84.0	0.402	0.719	170.9	401.9	0.430	1.008	5.07	1.709	101.7	220.1	18.3	0.472
		5.48	11.98	17.46	TWO	1.132	347.8	0.0	54.5										
45260.0	45384.0	0.230	303.3	-9.2	3.07	0.782	88.3	0.392	0.716	177.4	398.5	0.436	0.997	4.39	1.707	100.6	224.0	16.5	0.453
		5.20	11.44	16.64	TWO	1.132	347.8	0.0	57.7										
45270.0	45384.0	0.230	295.9	-7.7	3.90	0.787	93.1	0.388	0.718	185.0	396.1	0.439	0.996A	3.37	1.708	99.9	226.7	13.0	0.440
		5.20	11.07	16.27	TWO	1.132	347.8	0.0	59.7										
45280.0	45384.0	0.257	287.6	-4.9	5.59	0.799	98.5	0.392	0.725	193.6	394.8	0.441	1.009A	1.49	1.712	99.6	228.0	5.8	0.434
		5.64	10.90	16.54	TWO	1.132	347.8	0.0	60.4										
45290.0	45384.0	0.332	281.9	2.8	10.43	0.822	104.5	0.407	0.743	203.5	394.7	0.440	1.045A	-3.53	1.722	99.8	227.4	-13.3	0.453
		7.02	11.45	18.47	TWO	1.132	347.8	0.0	60.5										
45310.0	45384.0	0.517	283.2	-42.9	-12.43	0.929	118.5	0.494	0.857	226.1	396.7	0.434	1.281A	18.97	1.773	102.0	215.8	51.9	0.716
		11.13	19.12	30.25	ONE	1.132	347.8	0.0	65.6										
ARRIVAL DATE = 2445386.0																			
45210.0	45386.0	0.414	297.6	-16.2	2.67	0.799	67.1	0.508	0.746	152.9	428.4	0.367	1.125	6.74	1.718	111.7	198.4	15.9	0.684
		8.74	18.17	26.91	TWO	1.158	353.4	0.0	29.4										
45220.0	45386.0	0.366	303.3	-14.3	2.66	0.792	71.1	0.475	0.737	155.9	421.7	0.387	1.087	6.29	1.713	108.9	204.0	16.5	0.624
		7.71	16.41	24.12	TWO	1.158	353.4	0.0	34.4										
45230.0	45386.0	0.324	307.5	-12.3	2.74	0.786	75.0	0.448	0.729	159.8	415.9	0.403	1.055	5.83	1.709	106.5	209.3	16.8	0.576
		6.86	14.99	21.85	TWO	1.158	353.4	0.0	39.2										
45240.0	45386.0	0.287	305.7	-10.4	2.90	0.782	79.0	0.426	0.722	164.4	410.7	0.415	1.030	5.32	1.705	104.5	214.2	16.6	0.537
		6.16	13.87	20.03	TWO	1.158	353.4	0.0	43.5										
45250.0	45386.0	0.257	306.1	-8.7	3.19	0.779	83.2	0.409	0.717	169.9	406.4	0.424	1.010	4.72	1.702	103.0	218.6	15.6	0.507
		5.63	12.99	18.62	TWO	1.158	353.4	0.0	47.3										
45260.0	45386.0	0.237	305.2	-7.1	3.66	0.779	87.6	0.397	0.714	176.3	402.9	0.430	0.998	3.97	1.701	101.8	222.1	13.8	0.484
		5.31	12.34	17.64	TWO	1.158	353.4	0.0	50.2										
45270.0	45386.0	0.234	298.2	-5.6	4.45	0.783	92.4	0.392	0.715	183.7	400.4	0.435	0.995A	2.91	1.701	101.1	224.7	10.4	0.469
		5.26	11.90	17.16	TWO	1.158	353.4	0.0	52.1										
45280.0	45386.0	0.257	290.0	-3.6	5.91	0.795	97.8	0.395	0.721	192.2	399.0	0.437	1.006A	1.20	1.705	100.8	226.2	4.3	0.463
		5.64	11.72	17.36	TWO	1.158	353.4	0.0	52.9										
45290.0	45386.0	0.319	283.8	0.9	9.25	0.816	103.7	0.408	0.737	201.9	398.6	0.436	1.038A	-2.38	1.714	100.9	226.0	-8.4	0.476
		6.75	12.10	18.85	TWO	1.158	353.4	0.0	53.1										
45300.0	45386.0	0.501	284.0	14.9	22.44	0.854	110.5	0.437	0.770	212.6	399.5	0.433	1.108A	-15.80	1.731	101.8	219.2	-45.7	0.645
		10.75	17.02	27.77	TWO	1.158	353.4	0.0	60.9										
ARRIVAL DATE = 2445388.0																			
45210.0	45388.0	0.438	297.9	-15.4	3.33	0.798	65.4	0.528	0.744	152.6	433.6	0.351	1.137	6.83	1.715	113.8	199.2	14.3	0.754
		9.28	20.22	29.50	TWO	1.182	358.9	0.0	24.7										
45220.0	45388.0	0.386	304.0	-13.3	3.27	0.790	69.7	0.491	0.735	155.3	426.6	0.374	1.096	6.27	1.710	110.7	204.4	14.8	0.685
		8.14	18.20	26.34	TWO	1.182	358.9	0.0	29.3										
45230.0	45388.0	0.341	308.5	-11.2	3.30	0.784	73.8	0.461	0.727	159.0	420.5	0.392	1.062	5.72	1.706	108.1	209.4	14.9	0.629
		7.19	16.56	23.75	TWO	1.182	358.9	0.0	33.6										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45240.0	45388.0	0.301	311.0	-9.1	3.44	0.779	77.9	0.437	0.720	163.4	415.2	0.406	1.034	5.13	1.702	106.0	213.9	14.5	0.584
		6.42	15.25	21.67	TWO	1.182	358.9	0.0	37.5										
45250.0	45388.0	0.268	310.8	-7.1	3.70	0.776	82.1	0.418	0.715	168.8	410.8	0.416	1.013	4.46	1.699	104.4	217.9	13.5	0.549
		5.83	14.21	20.04	TWO	1.182	358.9	0.0	41.0										
45260.0	45388.0	0.246	307.5	-5.4	4.14	0.775	86.6	0.404	0.711	175.0	407.1	0.424	0.999	3.66	1.697	103.1	221.3	11.6	0.522
		5.45	13.44	18.89	TWO	1.182	358.9	0.0	43.7										
45270.0	45388.0	0.239	301.0	-4.0	4.87	0.779	91.5	0.398	0.711	182.3	404.5	0.429	0.994A	2.59	1.697	102.2	223.8	8.6	0.504
		5.34	12.92	18.26	TWO	1.182	358.9	0.0	45.5										
45280.0	45388.0	0.257	292.9	-2.6	6.13	0.789	96.9	0.398	0.717	190.6	402.8	0.431	1.002A	1.01	1.700	101.8	225.2	3.4	0.497
		5.64	12.70	18.34	TWO	1.182	358.9	0.0	46.5										
45290.0	45388.0	0.309	286.3	0.1	8.65	0.809	102.9	0.410	0.731	200.0	402.3	0.431	1.030A	-1.81	1.708	101.9	225.4	-6.0	0.507
		6.57	12.99	19.56	TWO	1.182	358.9	0.0	46.8										
45300.0	45388.0	0.423	283.8	7.3	15.42	0.844	109.5	0.436	0.761	210.5	402.9	0.429	1.092A	-8.88	1.724	102.7	222.7	-26.7	0.577
		8.95	15.03	23.98	TWO	1.182	358.9	0.0	49.9										
ARRIVAL DATE = 2445390.0																			
45210.0	45390.0	0.466	298.2	-14.7	4.01	0.796	63.4	0.552	0.742	152.4	438.8	0.333	1.152	7.00	1.715	116.1	200.4	13.0	0.832
		9.93	22.52	32.46	TWO	1.205	4.4	0.0	20.5										
45220.0	45390.0	0.410	304.6	-12.6	3.87	0.788	68.0	0.511	0.733	154.8	431.6	0.358	1.108	6.32	1.710	112.7	205.4	13.3	0.754
		8.66	20.21	28.87	TWO	1.205	4.4	0.0	24.7										
45230.0	45390.0	0.361	309.4	-10.3	3.85	0.781	72.3	0.477	0.725	158.1	425.2	0.379	1.071	5.66	1.706	109.9	210.0	13.3	0.690
		7.61	18.34	25.94	TWO	1.205	4.4	0.0	28.7										
45240.0	45390.0	0.318	312.4	-8.0	3.94	0.776	76.6	0.450	0.718	162.4	419.7	0.395	1.041	4.99	1.702	107.6	214.3	12.8	0.638
		6.74	16.82	23.57	TWO	1.205	4.4	0.0	32.3										
45250.0	45390.0	0.282	312.8	-5.9	4.16	0.772	80.9	0.429	0.712	167.5	415.0	0.407	1.017	4.26	1.698	105.7	218.1	11.7	0.597
		6.07	15.63	21.70	TWO	1.205	4.4	0.0	35.4										
45260.0	45390.0	0.256	310.1	-4.1	4.55	0.771	85.5	0.413	0.708	173.6	411.2	0.415	1.001	3.42	1.696	104.4	221.2	10.0	0.566
		5.62	14.72	20.34	TWO	1.205	4.4	0.0	38.0										
45270.0	45390.0	0.246	304.2	-2.7	5.20	0.774	90.4	0.405	0.708	180.6	408.3	0.421	0.994A	2.35	1.696	103.4	223.7	7.1	0.545
		5.44	14.11	19.55	TWO	1.205	4.4	0.0	39.8										
45280.0	45390.0	0.258	296.3	-1.6	6.29	0.783	95.8	0.404	0.712	188.7	406.5	0.425	0.999A	0.88	1.698	102.9	225.2	2.7	0.536
		5.65	13.83	19.48	TWO	1.205	4.4	0.0	40.9										
45290.0	45390.0	0.302	289.2	-0.1	8.27	0.801	101.8	0.413	0.724	197.9	405.7	0.425	1.023A	-1.47	1.705	102.9	225.5	-4.5	0.542
		6.43	14.02	20.46	TWO	1.205	4.4	0.0	41.4										
45300.0	45390.0	0.391	285.5	3.7	12.64	0.833	108.5	0.436	0.750	208.2	406.0	0.423	1.077A	-6.20	1.719	103.5	224.1	-18.0	0.585
		8.24	15.28	23.52	TWO	1.205	4.4	0.0	43.0										
ARRIVAL DATE = 2445392.0																			
45210.0	45392.0	0.500	298.4	-14.2	4.74	0.794	61.1	0.579	0.741	152.3	444.2	0.311	1.170	7.23	1.718	118.6	201.9	11.9	0.920
		10.72	25.10	35.82	TWO	1.226	9.9	0.0	16.9										
45220.0	45392.0	0.438	305.2	-11.9	4.50	0.786	65.9	0.534	0.731	154.3	436.6	0.340	1.122	6.42	1.713	114.8	206.8	12.1	0.831
		9.29	22.48	31.77	TWO	1.226	9.9	0.0	20.6										
45230.0	45392.0	0.385	310.4	-9.6	4.40	0.778	70.5	0.497	0.723	157.4	429.9	0.364	1.082	5.66	1.708	111.7	211.2	11.9	0.758
		8.11	20.34	28.44	TWO	1.226	9.9	0.0	24.3										
45240.0	45392.0	0.338	313.8	-7.2	4.43	0.773	75.0	0.466	0.715	161.3	424.1	0.382	1.048	4.91	1.704	109.2	215.3	11.4	0.699
		7.14	18.60	25.74	TWO	1.226	9.9	0.0	27.6										
45250.0	45392.0	0.299	314.9	-4.9	4.59	0.768	79.5	0.442	0.709	166.2	419.2	0.395	1.022	4.12	1.700	107.2	218.9	10.3	0.652
		6.38	17.22	23.60	TWO	1.226	9.9	0.0	30.6										
45260.0	45392.0	0.269	313.0	-3.0	4.92	0.767	84.2	0.424	0.705	172.0	415.2	0.405	1.004	3.23	1.698	105.7	221.9	8.6	0.616
		5.84	16.17	22.01	TWO	1.226	9.9	0.0	33.0										
45270.0	45392.0	0.254	307.7	-1.6	5.48	0.768	89.2	0.413	0.703	178.8	412.1	0.412	0.994	2.17	1.697	104.6	224.3	6.0	0.591
		5.58	15.44	21.02	TWO	1.226	9.9	0.0	34.8										
45280.0	45392.0	0.260	300.1	-0.7	6.41	0.776	94.6	0.410	0.706	186.7	410.0	0.417	0.996A	0.78	1.699	104.0	225.8	2.2	0.578
		5.68	15.07	20.75	TWO	1.226	9.9	0.0	36.0										
45290.0	45392.0	0.296	292.7	-0.0	8.01	0.792	100.6	0.417	0.716	195.6	409.0	0.418	1.015A	-1.25	1.705	103.9	226.4	-3.6	0.581
		6.32	15.16	21.48	TWO	1.226	9.9	0.0	36.6										
45300.0	45392.0	0.370	288.1	1.9	11.14	0.821	107.3	0.437	0.739	205.6	409.0	0.416	1.062A	-4.79	1.717	104.4	225.7	-13.1	0.612
		7.80	16.06	23.86	TWO	1.226	9.9	0.0	37.7										
45310.0	45392.0	0.514	288.0	8.1	19.09	0.870	114.6	0.476	0.786	216.4	409.9	0.411	1.160A	-13.14	1.741	105.6	221.5	-31.7	0.725
		11.07	19.38	30.45	TWO	1.226	9.9	0.0	43.5										
ARRIVAL DATE = 2445394.0																			
45210.0	45394.0	0.539	298.6	-13.8	5.53	0.791	58.3	0.611	0.739	152.4	449.9	0.287	1.190	7.56	1.724	121.4	203.7	11.0	1.017
		11.67	28.00	39.66	TWO	1.246	15.5	0.0	13.6										
45220.0	45394.0	0.471	305.7	-11.5	5.15	0.783	63.6	0.561	0.729	154.0	441.8	0.320	1.138	6.59	1.719	117.2	208.4	11.0	0.917
		10.05	25.01	35.06	TWO	1.246	15.5	0.0	16.9										
45230.0	45394.0	0.413	311.4	-9.0	4.95	0.775	68.5	0.520	0.720	156.6	434.8	0.346	1.094	5.71	1.714	113.8	212.8	10.8	0.834
		8.72	22.57	31.29	TWO	1.246	15.5	0.0	20.3										
45240.0	45394.0	0.362	315.4	-6.5	4.90	0.769	73.2	0.486	0.712	160.3	428.6	0.366	1.058	4.87	1.709	111.0	216.7	10.2	0.767
		7.62	20.59	28.21	TWO	1.246	15.5	0.0	23.4										
45250.0	45394.0	0.319	317.1	-4.1	5.00	0.764	77.9	0.458	0.705	164.8	423.4	0.382	1.029	4.02	1.705	108.8	220.2	9.1	0.713
		6.75	19.01	25.76	TWO	1.246	15.5	0.0	26.2										
45260.0	45394.0	0.284	316.0	-2.0	5.26	0.761	82.7	0.438	0.701	170.4	419.1	0.394	1.007	3.10	1.703	107.1	223.1	7.5	0.671
		6.11	17.79	23.90	TWO	1.246	15.5	0.0	28.5										
45270.0	45394.0	0.264	311.6	-0.6	5.73	0.762	87.7	0.424	0.698	176.9	415.7	0.402	0.995	2.03	1.701	105.8	225.5	5.2	0.642
		5.75	16.92	22.67	TWO	1.246	15.5	0.0	30.3										
45280.0	45394.0	0.263	304.4	0.1	6.51	0.768	93.2	0.418	0.700	184.5	413.4	0.407	0.993A	0.71	1.702	105.0	227.1	1.9	0.625
		5.74	16.43	22.17	TWO	1.246	15.5	0.0	31.6										
45290.0	45394.0	0.291	296.7	0.3	7.82	0.782	99.3	0.422	0.709	193.2	412.1	0.409	1.008A	-1.09	1.707	104.8	227.8	-2.9	0.624
		6.23	16.41	22.64	TWO	1.246	15.5	0.0	32.4										
45300.0	45394.0	0.354	291.3	1.0	10.18	0.808	106.0	0.439	0.728	202.9	411.8	0.409	1.047A	-3.92	1.718	105.2	227.5	-10.1	0.647
		7.47	17.07	24.54	TWO	1.246	15.5	0.0	33.4										
45310.0	45394.0	0.467	286.6	4.1	15.20	0.853	113.3	0.474	0.768	213.4	412.4	0.404	1.132A	-9.40	1.739	106.2	225.3	-22.3	0.718
		9.95	19.17	29.12	TWO	1.246	15.5	0.0	36.6										
ARRIVAL DATE = 2445396.0																			
45210.0	45396.0	0.584	298.5	-13.6	6.41	0.789	55.1	0.648	0.737	152.9	455.9	0.260	1.214	8.01	1.733	124.6	205.5	10.2	1.128
		12.79	31.25	44.04	TWO	1.265	21.2	0.0	11.1										
45220.0	45396.0	0.510	306.1	-11.2	5.86	0.780	60.8	0.593	0.727	153.9	447.3	0.296	1.158	6.84	1.728	119.9	210.3	10.1	1.013
		10.96	27.86	38.82	TWO	1.265	21.2	0.0	13.6										
45230.0	45396.0	0.445	312.3	-8.7	5.53	0.772	66.1	0.547	0.717	156.0	439.8	0.325	1.109	5.82	1.722	116.1	214.6	9.8	0.919
		9.45	25.08	34.53	TWO	1.265	21.2	0.0	16.6										
45240.0	45396.0	0.389	316.8	-6.0	5.38	0.765	71.1	0.508	0.709	159.3	433.3	0.349	1.069	4.88	1.718	113.0	218.5	9.2	0.842
		8.21	22.81	31.02	TWO	1.265	21.2	0.0	19.6										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45250.0	45396.0	0.342	319.3	-3.5	5.40	0.759	75.9	0.478	0.702	163.5	427.7	0.367	1.037	3.96	1.713	110.5	221.9	8.2	0.780
		7.21	20.49	28.20	TWO	1.265	21.2	0.0	22.2										
45260.0	45396.0	0.303	319.1	-1.3	5.58	0.756	80.9	0.454	0.696	168.7	423.1	0.380	1.013	3.00	1.710	108.6	224.8	6.6	0.732
		6.45	19.58	26.03	TWO	1.265	21.2	0.0	24.5										
45270.0	45396.0	0.277	315.6	0.3	5.95	0.755	86.1	0.437	0.693	174.9	419.4	0.390	0.997	1.93	1.708	107.1	227.1	4.5	0.697
		5.97	18.55	24.52	TWO	1.265	21.2	0.0	26.3										
45280.0	45396.0	0.269	309.0	1.0	6.60	0.760	91.7	0.429	0.694	182.2	416.7	0.397	0.992A	0.66	1.709	106.2	228.8	1.6	0.676
		5.84	17.92	23.76	TWO	1.265	21.2	0.0	27.7										
45290.0	45396.0	0.288	301.2	0.9	7.67	0.771	97.8	0.429	0.701	190.6	415.1	0.400	1.001A	-0.98	1.713	105.8	229.7	-2.4	0.670
		6.18	17.76	23.94	TWO	1.265	21.2	0.0	28.7										
45300.0	45396.0	0.341	295.0	0.7	9.50	0.795	104.5	0.442	0.717	199.9	414.5	0.400	1.034A	-3.34	1.722	106.0	229.8	-8.1	0.686
		7.20	18.22	25.42	TWO	1.265	21.2	0.0	29.6										
45310.0	45396.0	0.436	292.1	2.0	12.99	0.835	111.9	0.472	0.751	210.3	414.9	0.396	1.105A	-7.34	1.740	106.9	228.5	-16.8	0.738
		9.23	19.74	28.97	TWO	1.265	21.2	0.0	31.7										
ARRIVAL DATE = 2445398.0																			
45220.0	45398.0	0.554	306.4	-11.1	6.64	0.778	57.6	0.629	0.725	154.0	453.2	0.269	1.180	7.19	1.739	123.0	212.4	9.4	1.121
		12.04	31.07	43.12	TWO	1.282	26.9	0.0	10.8										
45230.0	45398.0	0.483	313.1	-8.5	6.15	0.769	63.3	0.578	0.715	155.6	445.1	0.302	1.128	6.00	1.734	118.7	216.7	9.0	1.014
		10.33	27.89	38.22	TWO	1.282	26.9	0.0	13.3										
45240.0	45398.0	0.422	318.2	-5.7	5.88	0.761	68.6	0.535	0.706	158.4	438.1	0.328	1.083	4.94	1.729	115.2	220.6	8.4	0.926
		8.91	25.30	34.21	TWO	1.282	26.9	0.0	16.0										
45250.0	45398.0	0.369	321.4	-3.1	5.80	0.754	73.7	0.500	0.698	162.2	432.1	0.349	1.047	3.94	1.724	112.4	224.0	7.4	0.855
		7.77	23.20	30.97	TWO	1.282	26.9	0.0	18.5										
45260.0	45398.0	0.325	322.1	-0.8	5.88	0.750	78.8	0.473	0.692	167.0	427.1	0.365	1.019	2.93	1.721	110.2	226.9	5.9	0.799
		6.88	21.56	28.43	TWO	1.282	26.9	0.0	20.8										
45270.0	45398.0	0.293	319.7	1.0	6.16	0.748	84.2	0.453	0.688	172.9	423.1	0.376	1.000	1.85	1.718	108.5	229.2	4.0	0.758
		6.26	20.33	26.60	TWO	1.282	26.9	0.0	22.6										
45280.0	45398.0	0.278	314.0	1.8	6.68	0.751	89.9	0.441	0.688	179.8	420.1	0.384	0.991	0.62	1.718	107.4	231.0	1.4	0.731
		5.99	19.54	25.53	TWO	1.282	26.9	0.0	24.1										
45290.0	45398.0	0.288	306.3	1.5	7.54	0.760	96.0	0.439	0.692	187.8	418.1	0.389	0.996A	-0.89	1.721	106.8	232.1	-2.0	0.720
		6.17	19.22	25.39	TWO	1.282	26.9	0.0	25.2										
45300.0	45398.0	0.330	299.4	0.8	8.98	0.781	102.8	0.448	0.705	196.9	417.2	0.390	1.021A	-2.93	1.729	106.9	232.4	-6.7	0.729
		6.98	19.49	26.47	TWO	1.282	26.9	0.0	26.2										
45310.0	45398.0	0.411	295.4	0.8	11.53	0.817	110.3	0.473	0.734	206.9	417.3	0.387	1.081A	-6.05	1.744	107.6	231.6	-13.2	0.768
		8.68	20.64	29.32	TWO	1.282	26.9	0.0	27.8										
ARRIVAL DATE = 2445400.0																			
45230.0	45400.0	0.527	313.8	-8.4	6.83	0.765	60.0	0.613	0.712	155.5	450.8	0.275	1.149	6.26	1.749	121.7	219.0	8.3	1.122
		11.38	31.08	42.46	TWO	1.298	32.8	0.0	10.4										
45240.0	45400.0	0.459	319.5	-5.6	6.41	0.757	65.7	0.566	0.703	157.7	443.3	0.305	1.100	5.06	1.743	117.8	222.9	7.7	1.021
		9.77	28.10	37.86	TWO	1.298	32.8	0.0	12.7										
45250.0	45400.0	0.400	323.4	-2.8	6.20	0.749	71.1	0.527	0.694	161.0	436.8	0.329	1.060	3.96	1.739	114.6	226.4	6.7	0.939
		8.45	25.68	34.12	TWO	1.298	32.8	0.0	15.1										
45260.0	45400.0	0.351	325.1	-0.4	6.18	0.743	76.5	0.495	0.688	165.4	431.4	0.347	1.028	2.89	1.734	112.1	229.3	5.3	0.874
		7.40	23.76	31.16	TWO	1.298	32.8	0.0	17.3										
45270.0	45400.0	0.313	323.8	1.5	6.36	0.740	82.0	0.472	0.683	170.8	427.0	0.361	1.005	1.79	1.732	110.1	231.7	3.5	0.825
		6.64	22.31	28.94	TWO	1.298	32.8	0.0	19.2										
45280.0	45400.0	0.290	319.1	2.5	6.75	0.741	87.8	0.456	0.681	177.4	423.6	0.370	0.992	0.59	1.730	108.8	233.5	1.2	0.791
		6.21	21.31	27.52	TWO	1.298	32.8	0.0	20.8										
45290.0	45400.0	0.290	311.8	2.3	7.43	0.749	94.1	0.450	0.684	185.0	421.2	0.376	0.992A	-0.83	1.732	108.0	234.8	-1.8	0.774
		6.22	20.80	27.02	TWO	1.298	32.8	0.0	22.0										
45300.0	45400.0	0.322	304.4	1.2	8.56	0.766	101.0	0.455	0.694	193.7	419.9	0.378	1.010A	-2.63	1.738	107.8	235.3	-5.6	0.776
		6.82	20.88	27.69	TWO	1.298	32.8	0.0	23.1										
45310.0	45400.0	0.391	299.3	0.4	10.48	0.798	108.5	0.475	0.718	203.4	419.6	0.377	1.059A	-5.17	1.752	108.3	235.0	-10.7	0.805
		8.23	21.73	29.96	TWO	1.298	32.8	0.0	24.5										
ARRIVAL DATE = 2445402.0																			
45230.0	45402.0	0.578	314.2	-8.6	7.60	0.762	56.3	0.654	0.710	155.7	457.0	0.245	1.174	6.63	1.767	125.2	221.4	7.7	1.244
		12.64	34.69	47.33	TWO	1.312	38.9	0.0	8.1										
45240.0	45402.0	0.503	320.6	-5.6	6.98	0.752	62.4	0.601	0.700	157.2	448.9	0.279	1.120	5.24	1.761	120.7	225.5	7.0	1.128
		10.79	31.26	42.06	TWO	1.312	38.9	0.0	9.6										
45250.0	45402.0	0.438	325.3	-2.8	6.63	0.744	68.2	0.557	0.691	160.0	441.9	0.306	1.075	4.02	1.756	117.1	229.0	6.1	1.033
		9.27	28.46	37.74	TWO	1.312	38.9	0.0	11.8										
45260.0	45402.0	0.382	327.8	-0.1	6.49	0.737	73.8	0.522	0.683	163.9	435.9	0.327	1.039	2.89	1.751	114.2	232.0	4.8	0.958
		8.04	26.23	34.27	TWO	1.312	38.9	0.0	13.9										
45270.0	45402.0	0.337	327.7	2.0	6.55	0.732	79.5	0.494	0.677	168.9	431.0	0.343	1.012	1.76	1.748	111.9	234.5	3.2	0.899
		7.11	24.50	31.61	TWO	1.312	38.9	0.0	15.9										
45280.0	45402.0	0.306	324.3	3.2	6.81	0.732	85.5	0.475	0.674	175.0	427.2	0.354	0.995	0.56	1.746	110.3	236.4	1.1	0.857
		6.51	23.26	29.78	TWO	1.312	38.9	0.0	17.6										
45290.0	45402.0	0.297	317.7	3.1	7.33	0.737	91.9	0.464	0.676	182.2	424.4	0.362	0.989A	-0.78	1.747	109.2	237.8	-1.5	0.833
		6.33	22.54	28.88	TWO	1.312	38.9	0.0	19.0										
45300.0	45402.0	0.317	310.0	1.9	8.21	0.750	98.9	0.465	0.683	190.5	422.7	0.365	1.001A	-2.40	1.752	108.8	238.5	-4.8	0.828
		6.72	22.40	29.11	TWO	1.312	38.9	0.0	20.2										
45310.0	45402.0	0.373	303.9	0.4	9.67	0.778	106.5	0.480	0.702	199.8	422.1	0.365	1.039A	-4.54	1.763	109.1	238.5	-8.9	0.848
		7.86	22.98	30.84	TWO	1.312	38.9	0.0	21.5										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
ARRIVAL DATE = 2445704.0																			
45560.0	45704.0	0.567	272.6	4.7	23.27	0.753	63.9	0.583	0.711	157.0	319.6	0.297D	1.125	-24.00	2.178	75.3	223.3	-47.0	1.172
		12.37	32.59	44.96	ONE	0.692	227.0	0.0	132.9										
45570.0	45704.0	0.498	280.9	-2.2	15.36	0.732	65.8	0.586	0.694	159.7	313.2	0.287D	1.100	-15.51	2.170	73.0	218.8	-32.0	1.048
		10.69	28.90	39.59	ONE	0.692	227.0	0.0	147.1										
45580.0	45704.0	0.465	287.4	-5.8	11.63	0.709	68.0	0.591	0.676	162.6	306.7	0.277D	1.075	-11.17	2.161	70.7	219.4	-22.2	1.047
		9.91	28.88	38.79	ONE	0.692	227.0	0.0	156.6										
45590.0	45704.0	0.444	292.5	-7.7	9.55	0.685	70.7	0.598	0.659	165.7	300.3	0.265D	1.053	-8.43	2.152	68.4	221.2	-15.7	1.087
		9.41	30.05	39.46	ONE	0.692	227.0	0.0	163.3										
45600.0	45704.0	0.427	296.3	-8.7	8.29	0.659	74.2	0.607	0.642	169.1	294.0	0.252D	1.031	-6.47	2.143	66.0	223.3	-11.1	1.142
		9.04	31.67	40.71	ONE	0.692	227.0	0.0	168.2										
45610.0	45704.0	0.415	298.3	-9.4	7.51	0.634	78.8	0.618	0.626	172.9	288.0	0.239D	1.013	-4.91	2.134	63.8	225.4	-7.8	1.203
		8.77	33.48	42.25	ONE	0.692	227.0	0.0	172.0										
45620.0	45704.0	0.411	298.3	-10.2	7.05	0.611	85.0	0.631	0.613	177.1	282.4	0.226D	1.000	-3.58	2.126	61.5	227.4	-5.3	1.266
		8.67	35.36	44.03	ONE	0.692	227.0	0.0	174.7										
45630.0	45704.0	0.419	295.7	-11.5	6.83	0.597	93.4	0.646	0.605	181.9	277.4	0.214D	0.996A	-2.36	2.121	59.4	229.1	-3.2	1.330
		8.86	37.27	46.13	ONE	0.692	227.0	0.0	176.1										
45640.0	45704.0	0.453	290.9	-13.2	6.82	0.604	104.5	0.666	0.606	187.6	273.2	0.202D	1.010A	-1.18	2.121	57.3	230.6	-1.5	1.396
		9.62	39.20	48.83	ONE	0.692	227.0	0.0	176.1										
45650.0	45704.0	0.531	284.7	-15.1	7.01	0.654	118.0	0.693	0.628	194.7	270.3	0.193D	1.063A	0.04	2.135	55.4	231.5	0.1	1.464
		11.48	41.24	52.72	ONE	0.692	227.0	0.0	175.5										
ARRIVAL DATE = 2445706.0																			
45570.0	45706.0	0.561	276.8	9.2	25.98	0.743	67.7	0.557	0.702	159.4	323.2	0.311D	1.093	-25.44	2.134	77.0	233.8	-49.3	1.179
		12.21	32.76	44.98	ONE	0.716	238.1	0.0	130.6										
45580.0	45706.0	0.469	285.1	2.0	16.64	0.724	70.2	0.559	0.686	162.4	317.3	0.303D	1.069	-15.49	2.127	75.0	227.4	-32.7	1.015
		10.00	27.91	37.92	ONE	0.716	238.1	0.0	145.8										
45590.0	45706.0	0.427	290.7	-2.1	12.39	0.703	73.1	0.562	0.670	165.7	311.2	0.293D	1.046	-10.62	2.119	72.8	227.6	-21.9	0.999
		9.04	27.46	36.50	ONE	0.716	238.1	0.0	155.8										
45600.0	45706.0	0.401	294.3	-4.5	10.07	0.682	76.7	0.567	0.655	169.4	305.2	0.283D	1.026	-7.62	2.110	70.8	229.2	-14.9	1.029
		8.46	28.33	36.79	ONE	0.716	238.1	0.0	162.7										
45610.0	45706.0	0.384	295.9	-6.1	8.68	0.662	81.3	0.575	0.641	173.5	299.6	0.273D	1.010	-5.51	2.103	68.7	231.0	-10.1	1.074
		8.08	29.66	37.74	ONE	0.716	238.1	0.0	167.7										
45620.0	45706.0	0.376	295.1	-7.7	7.81	0.647	87.3	0.584	0.630	178.1	294.5	0.262D	0.999	-3.85	2.096	66.8	232.8	-6.6	1.124
		7.91	31.14	39.05	ONE	0.716	238.1	0.0	171.6										
45630.0	45706.0	0.383	291.7	-9.6	7.30	0.640	95.1	0.596	0.625	183.5	290.1	0.252D	0.998A	-2.45	2.093	65.1	234.4	-4.0	1.175
		8.07	32.65	40.72	ONE	0.716	238.1	0.0	174.6										
45640.0	45706.0	0.418	286.1	-11.9	7.04	0.654	105.1	0.613	0.630	190.0	286.7	0.244D	1.017A	-1.18	2.096	63.5	235.5	-1.8	1.225
		8.83	34.14	42.97	ONE	0.716	238.1	0.0	176.9										
45650.0	45706.0	0.498	279.7	-14.2	7.01	0.708	117.0	0.639	0.658	198.3	285.0	0.238D	1.079A	0.04	2.112	62.1	236.0	0.1	1.275
		10.69	35.64	46.32	ONE	0.716	238.1	0.0	177.9										
ARRIVAL DATE = 2445708.0																			
45580.0	45708.0	0.544	280.3	12.9	27.14	0.736	72.0	0.531	0.694	162.4	327.0	0.325D	1.063	-25.38	2.088	78.7	241.9	-50.3	1.141
		11.80	31.65	43.44	ONE	0.747	248.5	0.0	129.4										
45590.0	45708.0	0.436	287.8	5.6	17.02	0.718	75.1	0.531	0.680	165.9	321.5	0.319D	1.041	-14.66	2.081	76.9	234.6	-32.3	0.959
		9.24	26.28	35.51	ONE	0.747	248.5	0.0	145.1										
45600.0	45708.0	0.388	291.8	1.0	12.54	0.701	78.8	0.533	0.666	169.9	316.0	0.311D	1.022	-9.55	2.074	75.0	234.7	-20.8	0.937
		8.18	25.61	33.79	ONE	0.747	248.5	0.0	155.2										
45610.0	45708.0	0.362	293.1	-2.1	10.12	0.686	83.5	0.537	0.655	174.3	310.8	0.303D	1.007	-6.47	2.067	73.3	236.0	-13.5	0.958
		7.62	26.24	33.86	ONE	0.747	248.5	0.0	161.7										
45620.0	45708.0	0.350	291.6	-4.8	8.68	0.676	89.3	0.544	0.647	179.4	306.2	0.295D	0.998	-4.31	2.063	71.6	237.6	-8.5	0.993
		7.37	27.27	34.64	ONE	0.747	248.5	0.0	166.2										
45630.0	45708.0	0.357	287.4	-7.6	7.80	0.676	96.6	0.553	0.644	185.4	302.4	0.288D	1.001A	-2.64	2.061	70.2	238.9	-5.0	1.031
		7.51	28.40	35.92	ONE	0.747	248.5	0.0	169.2										
45640.0	45708.0	0.394	281.1	-10.6	7.27	0.696	105.8	0.568	0.654	192.8	299.9	0.282D	1.025A	-1.23	2.067	69.0	239.7	-2.2	1.068
		8.30	29.50	37.80	ONE	0.747	248.5	0.0	171.0										
45650.0	45708.0	0.477	274.8	-13.4	7.00	0.753	116.5	0.594	0.688	202.2	299.3	0.279D	1.097A	0.04	2.085	68.1	239.7	0.1	1.104
		10.18	30.56	40.74	ONE	0.747	248.5	0.0	171.2										
ARRIVAL DATE = 2445710.0																			
45560.0	45710.0	0.525	272.5	-57.3	-23.85	0.776	68.8	0.513	0.729	156.4	353.1	0.355D	1.103	25.03	2.061	87.7	237.8	63.1	0.977
		11.33	26.81	38.14	TWO	0.782	258.3	0.0	115.1										
45590.0	45710.0	0.511	283.0	15.7	26.50	0.731	76.7	0.505	0.688	166.2	331.1	0.341D	1.036	-23.62	2.041	80.4	247.1	-49.7	1.058
		11.00	29.19	40.19	ONE	0.782	258.3	0.0	129.4										
45600.0	45710.0	0.399	288.6	8.2	16.48	0.718	80.6	0.504	0.677	170.5	326.2	0.336D	1.018	-13.00	2.035	78.8	240.4	-30.5	0.885
		8.40	24.07	32.47	ONE	0.782	258.3	0.0	145.0										
45610.0	45710.0	0.352	290.0	2.9	12.10	0.707	85.2	0.505	0.667	175.3	321.5	0.330D	1.004	-8.02	2.030	77.3	240.4	-18.7	0.862
		7.42	23.39	30.81	ONE	0.782	258.3	0.0	154.4										
45620.0	45710.0	0.333	288.0	-1.4	9.75	0.701	90.9	0.510	0.661	180.9	317.4	0.324D	0.998A	-5.02	2.027	75.9	241.6	-11.3	0.877
		7.03	23.84	30.88	ONE	0.782	258.3	0.0	159.9										
45630.0	45710.0	0.339	283.0	-5.4	8.36	0.706	97.9	0.518	0.662	187.5	314.3	0.319D	1.004A	-2.94	2.027	74.8	242.6	-6.4	0.902
		7.15	24.58	31.74	ONE	0.782	258.3	0.0	163.1										
45640.0	45710.0	0.378	276.5	-9.3	7.50	0.731	106.5	0.532	0.675	195.7	312.6	0.316D	1.035A	-1.32	2.034	73.9	243.1	-2.8	0.928
		7.96	25.34	33.30	ONE	0.782	258.3	0.0	164.5										
45650.0	45710.0	0.464	270.5	-12.7	6.99	0.790	116.3	0.560	0.717	206.0	313.0	0.315D	1.118A	0.04	2.055	73.5	242.5	0.1	0.951
		9.88	26.04	35.92	ONE	0.782	258.3	0.0	164.2										
ARRIVAL DATE = 2445712.0																			
45560.0	45712.0	0.438	277.0	-48.6	-14.77	0.781	69.7	0.499	0.733	156.3	361.6	0.367	1.098	16.54	2.020	90.5	226.3	53.6	0.714
		9.27	19.04	28.31	TWO	0.820	267.5	0.0	116.5										
45570.0	45712.0	0.491	281.5	-58.7	-23.00	0.768	72.3	0.490	0.720	159.4	355.7	0.367D	1.073	25.31	2.014	88.6	244.7	64.0	0.958
		10.52	26.23	36.75	TWO	0.820	267.5	0.0	113.9										
45600.0	45712.0	0.464	284.4	17.3	24.23	0.731	82.0	0.480	0.686	171.1	335.7	0.357D	1.015	-20.32	1.996	82.2	249.5	-47.0	0.939
		9.88	25.68	35.56	ONE	0.820	267.5	0.0	130.4										
45610.0	45712.0	0.361	286.7	9.2	15.15	0.723	86.6	0.479	0.678	176.3	331.6	0.353D	1.003	-10.69	1.992	80.9	244.6	-27.3	0.797
		7.60	21.47	29.08	ONE	0.820	267.5	0.0	145.0										
45620.0	45712.0	0.326	284.5	2.7	11.17	0.721	92.2	0.482	0.674	182.4	328.1	0.349D	0.999A	-6.13	1.990	79.8	244.7	-15.6	0.778
		6.90	20.93	27.83	ONE	0.820	267.5	0.0	152.7										
45630.0	45712.0	0.328	279.1	-3.0	9.03	0.731	99.0	0.489	0.677	189.7	325.6	0.346D	1.009A	-3.38	1.992	78.9	245.3	-8.4	0.788
		6.94	21.23	28.17	ONE	0.820	267.5	0.0	156.4										
45640.0	45712.0	0.369	272.4	-8.0	7.76	0.759	107.1	0.504	0.695	198.5	324.6	0.345D	1.045A	-1.45	2.001	78.3	245.4	-3.5	0.804
		7.77	21.68	29.45	ONE	0.820	267.5	0.0	157.6										
45650.0	45712.0	0.457	266.9	-12.1	6.98	0.820	116.3	0.535	0.742	209.6	325.7	0.345D	1.139A	0.04	2.024	78.2	244.1	0.1	0.818
		9.71	22.11	31.82	ONE	0.820	267.5	0.0	156.7										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
							ARRIVAL DATE = 2445714.0												
45560.0	45714.0	0.400	278.1	-42.7	-10.36	0.785	70.4	0.488	0.736	156.2	369.9	0.377	1.095	12.69	1.980	93.2	220.9	47.9	0.585
		8.43	15.26	23.69	TWO	0.860	276.1	0.0	112.5										
45570.0	45714.0	0.402	284.5	-49.4	-14.04	0.773	73.2	0.477	0.724	159.5	363.8	0.379	1.070	16.88	1.974	91.2	232.3	54.6	0.703
		8.48	18.72	27.20	TWO	0.860	276.1	0.0	114.7										
45580.0	45714.0	0.462	288.7	-60.5	-22.54	0.761	76.2	0.468	0.713	163.2	358.3	0.379D	1.047	25.88	1.968	89.5	251.2	65.5	0.944
		9.83	25.81	35.65	TWO	0.860	276.1	0.0	112.1										
45610.0	45714.0	0.409	283.4	17.1	20.83	0.737	87.8	0.458	0.687	177.4	341.1	0.373D	1.002	-16.03	1.955	84.1	250.1	-41.9	0.804
		8.63	21.68	30.31	ONE	0.860	276.1	0.0	132.0										
45620.0	45714.0	0.332	281.3	7.7	13.28	0.738	93.3	0.459	0.685	183.9	338.1	0.370D	1.000A	-7.96	1.954	83.2	247.1	-22.5	0.703
		7.02	18.72	25.75	ONE	0.860	276.1	0.0	143.9										
45630.0	45714.0	0.325	275.6	-0.3	9.90	0.750	99.9	0.466	0.691	191.7	336.2	0.369D	1.013A	-4.05	1.957	82.5	247.0	-11.5	0.691
		6.87	18.36	25.23	ONE	0.860	276.1	0.0	149.0										
45640.0	45714.0	0.364	269.1	-6.8	8.07	0.781	107.5	0.483	0.711	201.1	335.8	0.368D	1.055A	-1.65	1.968	82.2	246.6	-4.6	0.696
		7.67	18.52	26.19	ONE	0.860	276.1	0.0	150.1										
45650.0	45714.0	0.453	264.1	-11.6	6.97	0.843	116.3	0.517	0.764	212.7	337.4	0.369D	1.158A	0.05	1.992	82.4	244.6	0.1	0.704
		9.63	18.76	28.38	ONE	0.860	276.1	0.0	148.5										
							ARRIVAL DATE = 2445716.0												
45560.0	45716.0	0.379	278.5	-38.5	-7.69	0.788	70.9	0.480	0.739	156.1	377.8	0.384	1.093	10.57	1.941	95.7	215.6	44.2	0.508
		7.98	13.04	21.02	TWO	0.900	284.2	0.0	105.2										
45570.0	45716.0	0.364	285.0	-42.9	-9.63	0.777	73.8	0.467	0.728	159.5	371.6	0.388	1.067	12.98	1.936	93.7	226.3	48.7	0.578
		7.66	15.05	22.71	TWO	0.900	284.2	0.0	110.5										
45580.0	45716.0	0.367	290.3	-50.4	-13.35	0.767	76.9	0.456	0.717	163.4	366.0	0.390	1.044	17.15	1.931	91.9	237.0	55.7	0.689
		7.73	18.30	26.04	TWO	0.900	284.2	0.0	112.5										
45590.0	45716.0	0.441	293.4	-62.9	-22.57	0.758	80.4	0.448	0.708	167.8	361.2	0.390	1.025	26.82	1.926	90.4	257.4	67.9	0.938
		9.35	25.64	34.99	TWO	0.900	284.2	0.0	109.6										
45610.0	45716.0	0.586	279.9	24.9	35.61	0.748	88.6	0.441	0.695	178.2	349.5	0.388D	1.001	-30.48	1.919	86.8	272.3	-65.4	1.069
		12.85	29.52	42.37	ONE	0.900	284.2	0.0	114.0										
45620.0	45716.0	0.361	278.9	14.1	16.96	0.751	94.1	0.442	0.694	185.2	347.5	0.388D	1.001A	-11.39	1.919	86.2	249.3	-34.3	0.672
		7.61	17.80	25.41	ONE	0.900	284.2	0.0	132.7										
45630.0	45716.0	0.328	273.0	2.9	11.14	0.765	100.5	0.449	0.702	193.5	346.1	0.387D	1.017A	-5.12	1.923	85.7	247.6	-16.2	0.612
		6.93	16.06	22.99	ONE	0.900	284.2	0.0	140.4										
45640.0	45716.0	0.363	266.5	-5.5	8.45	0.798	107.9	0.467	0.725	203.3	346.1	0.387D	1.063A	-1.94	1.935	85.6	246.5	-6.2	0.606
		7.64	15.87	23.51	ONE	0.900	284.2	0.0	141.8										
45650.0	45716.0	0.451	261.9	-11.2	6.96	0.860	116.3	0.504	0.781	215.2	348.1	0.388D	1.174A	0.05	1.960	86.0	243.7	0.2	0.610
		9.58	15.99	25.57	ONE	0.900	284.2	0.0	139.5										
45660.0	45716.0	0.598	260.2	-15.0	6.07	0.971	125.2	0.579	0.925	229.3	352.1	0.389D	1.461A	1.50	2.010	87.1	238.0	4.9	0.622
		13.15	16.35	29.50	ONE	0.900	284.2	0.0	133.6										
							ARRIVAL DATE = 2445718.0												
45560.0	45718.0	0.367	278.7	-35.2	-5.84	0.790	71.2	0.475	0.741	156.0	385.2	0.389	1.092	9.27	1.906	98.1	209.5	41.1	0.462
		7.74	11.71	19.44	TWO	0.939	291.8	0.0	95.8										
45570.0	45718.0	0.344	284.9	-38.1	-6.94	0.780	74.2	0.460	0.730	159.5	379.1	0.394	1.066	10.79	1.901	96.0	220.5	44.6	0.504
		7.25	12.91	20.16	TWO	0.939	291.8	0.0	103.2										
45580.0	45718.0	0.328	289.9	-43.0	-8.85	0.771	77.4	0.447	0.720	163.5	373.5	0.398	1.043	13.11	1.896	94.2	230.2	49.3	0.566
		6.94	14.71	21.65	TWO	0.939	291.8	0.0	108.1										
45590.0	45718.0	0.335	293.3	-51.8	-12.70	0.763	81.0	0.438	0.712	168.1	368.6	0.400	1.023	17.35	1.891	92.6	240.2	57.0	0.672
		7.08	17.81	24.88	TWO	0.939	291.8	0.0	109.8										
45600.0	45718.0	0.434	294.7	-65.9	-23.37	0.758	85.1	0.431	0.705	173.4	364.6	0.4C1	1.009	28.41	1.888	91.4	263.7	71.3	0.948
		9.19	25.93	35.12	TWO	0.939	291.8	0.0	106.4										
45620.0	45718.0	0.456	277.6	22.3	25.37	0.761	94.7	0.428	0.702	186.3	356.0	0.401D	1.003A	-19.57	1.886	88.8	255.5	-55.2	0.769
		9.69	20.66	30.35	ONE	0.939	291.8	0.0	117.3										
45630.0	45718.0	0.341	271.3	7.2	13.16	0.777	101.0	0.436	0.711	194.9	355.2	0.401D	1.021A	-6.96	1.891	88.5	247.0	-24.2	0.559
		7.20	14.52	21.72	ONE	0.939	291.8	0.0	130.3										
45640.0	45718.0	0.363	264.6	-4.0	8.98	0.810	108.2	0.455	0.736	205.1	355.5	0.4C1D	1.071A	-2.38	1.903	88.6	245.0	-8.5	0.533
		7.65	13.74	21.39	ONE	0.939	291.8	0.0	132.5										
45650.0	45718.0	0.445	260.4	-10.9	6.95	0.872	116.2	0.494	0.794	217.1	357.6	0.4C1D	1.186A	0.06	1.929	89.2	241.4	0.2	0.535
		9.53	13.80	23.33	ONE	0.939	291.8	0.0	129.5										
45660.0	45718.0	0.593	259.1	-15.2	5.81	0.980	124.8	0.573	0.940	231.0	361.4	0.401	1.478A	1.66	1.979	90.5	234.5	6.0	0.551
		13.03	14.28	27.31	ONE	0.939	291.8	0.0	122.4										
							ARRIVAL DATE = 2445720.0												
45560.0	45720.0	0.361	278.9	-32.5	-4.44	0.791	71.3	0.472	0.742	155.9	392.3	0.392	1.092	8.42	1.873	100.2	203.0	37.9	0.440
		7.61	11.05	18.66	TWO	0.977	299.1	0.0	85.2										
45570.0	45720.0	0.333	284.8	-34.4	-5.08	0.782	74.4	0.455	0.732	159.5	386.2	0.399	1.065	9.44	1.868	98.1	214.2	41.1	0.461
		7.03	11.67	18.70	TWO	0.977	299.1	0.0	93.9										
45580.0	45720.0	0.309	289.3	-37.5	-6.13	0.774	77.8	0.441	0.723	163.5	380.7	0.4C4	1.042	10.84	1.863	96.3	224.0	44.7	0.496
		6.57	12.67	19.24	TWO	0.977	299.1	0.0	100.5										
45590.0	45720.0	0.295	292.0	-43.2	-8.02	0.767	81.4	0.430	0.715	168.3	375.8	0.4C7	1.022	13.07	1.859	94.7	232.6	49.7	0.550
		6.30	14.24	20.55	TWO	0.977	299.1	0.0	104.9										
45600.0	45720.0	0.308	292.5	-53.4	-12.10	0.763	85.5	0.422	0.709	173.7	371.7	0.409	1.008	17.48	1.856	93.5	241.5	58.4	0.653
		6.56	17.26	23.82	TWO	0.977	299.1	0.0	106.3										
45610.0	45720.0	0.454	292.0	-69.2	-25.66	0.762	90.1	0.418	0.706	180.2	368.7	0.411	1.001A	31.36	1.854	92.6	273.1	76.3	0.993
		9.66	27.26	36.91	TWO	0.977	299.1	0.0	102.3										
45630.0	45720.0	0.378	270.9	13.5	17.18	0.785	101.3	0.426	0.718	196.0	363.4	0.412	1.024A	-10.84	1.861	91.0	246.0	-38.7	0.559
		7.97	14.51	22.48	ONE	0.977	299.1	0.0	117.9										
45640.0	45720.0	0.366	263.6	-2.2	9.77	0.819	108.3	0.447	0.744	206.4	364.0	0.412	1.076A	-3.10	1.874	91.2	242.0	-12.2	0.478
		7.72	12.17	19.88	ONE	0.977	299.1	0.0	122.1										
45650.0	45720.0	0.447	255.4	-10.7	6.94	0.880	116.1	0.488	0.802	218.4	366.1	0.411	1.194A	0.08	1.900	92.0	237.6	0.3	0.479
		9.48	12.17	21.66	ONE	0.977	299.1	0.0	118.5										
45660.0	45720.0	0.588	258.6	-15.4	5.50	0.984	124.5	0.567	0.947	231.9	369.6	0.410	1.483A	1.88	1.949	93.5	229.9	7.3	0.503
		12.88	12.87	25.75	ONE	0.977	299.1	0.0	110.6										
							ARRIVAL DATE = 2445722.0												
45560.0	45722.0	0.360	279.1	-30.1	-3.31	0.792	71.2	0.472	0.742	155.8	399.0	0.392	1.093	7.85	1.843	102.3	196.9	34.3	0.436
		7.58	10.94	18.52	TWO	1.013	306.0	0.0	74.3										
45570.0	45722.0	0.327	284.8	-31.3	-3.67	0.783	74.5	0.453	0.733	159.3	392.9	0.4C1	1.065	8.53	1.838	100.1	207.8	37.6	0.440
		6.93	11.08	18.00	TWO	1.013	306.0	0.0	83.5										
45580.0	45722.0	0.299	289.0	-33.2	-4.26	0.776	77.9	0.438	0.724	163.5	387.4	0.4C7	1.041	9.42	1.834	98.3	217.6	40.6	0.456
		6.38	11.53	17.91	TWO	1.013	306.0	0.0	91.2										
45590.0	45722.0	0.277	291.1	-36.8	-5.25	0.770	81.6	0.425	0.717	168.3	382.6	0.412	1.022	10.70	1.830	96.7	225.9	44.2	0.484
		5.97	12.33	18.30	TWO	1.013	306.0	0.0	97.1										
45600.0	45722.0	0.266	290.4	-43.1	-7.12	0.766	85.7	0.416	0.711	173.9	378.5	0.415	1.008	12.83	1.827	95.4	233.0	49.5	0.531
		5.79	13.69	19.48	TWO	1.013	306.0	0.0	100.9										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / COIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45610.0	45722.0	0.292	286.7	-54.6	-11.57	0.767	90.3	0.411	0.709	180.5	375.4	0.417	1.001A	17.54	1.825	94.5	240.2	59.8	0.635
		6.25	16.73	22.97	TWO	1.013	306.0	0.0	101.9										
45620.0	45722.0	0.540	288.5	-72.0	-31.99	0.774	95.6	0.412	0.712	188.2	373.7	0.418	1.005A	38.22	1.827	94.0	310.8	82.6	1.137
		11.70	31.53	43.23	TWO	1.013	306.0	0.0	97.4										
45630.0	45722.0	0.527	273.9	23.5	29.75	0.791	101.4	0.419	0.723	196.7	370.8	0.420	1.026A	-23.26	1.833	93.2	251.9	-67.9	0.780
		11.38	20.58	32.35	ONE	1.013	306.0	0.0	102.7										
45640.0	45722.0	0.374	263.3	0.6	11.17	0.824	108.3	0.440	0.749	207.2	371.7	0.419	1.079A	-4.42	1.846	93.6	237.9	-18.5	0.447
		7.87	11.25	19.13	ONE	1.013	306.0	0.0	110.7										
45650.0	45722.0	0.444	258.9	-10.6	6.92	0.884	115.9	0.482	0.807	219.1	373.7	0.418	1.196A	0.10	1.872	94.5	232.9	0.4	0.441
		9.41	11.10	20.51	ONE	1.013	306.0	0.0	106.9										
45660.0	45722.0	0.580	258.3	-15.8	5.11	0.984	124.1	0.561	0.946	232.2	376.9	0.415	1.478A	2.18	1.920	96.0	224.7	8.8	0.475
		12.69	12.07	24.76	ONE	1.013	306.0	0.0	98.6										
ARRIVAL DATE = 2445724.0																			
45560.0	45724.0	0.362	279.4	-28.0	-2.35	0.792	70.9	0.475	0.743	155.5	405.3	0.390	1.096	7.46	1.816	104.2	191.9	30.7	0.448
		7.62	11.30	18.93	TWO	1.048	312.6	0.0	63.9										
45570.0	45724.0	0.327	285.0	-28.6	-2.54	0.784	74.3	0.454	0.733	159.1	399.2	0.400	1.067	7.92	1.811	102.0	202.0	33.8	0.438
		6.91	11.02	17.93	TWO	1.048	312.6	0.0	73.0										
45580.0	45724.0	0.295	288.9	-29.7	-2.86	0.777	77.8	0.437	0.725	163.3	393.8	0.409	1.042	8.47	1.807	100.1	211.4	36.6	0.439
		6.31	11.04	17.35	TWO	1.048	312.6	0.0	81.0										
45590.0	45724.0	0.268	290.7	-31.8	-3.38	0.771	81.6	0.423	0.718	168.2	389.0	0.415	1.022	9.21	1.803	98.5	219.6	39.4	0.449
		5.83	11.33	17.16	TWO	1.048	312.6	0.0	87.6										
45600.0	45724.0	0.250	285.3	-35.6	-4.28	0.769	85.8	0.413	0.713	173.9	385.0	0.419	1.008	10.32	1.800	97.2	226.3	42.9	0.470
		5.51	11.92	17.43	TWO	1.048	312.6	0.0	92.7										
45610.0	45724.0	0.248	284.3	-42.1	-6.09	0.770	90.4	0.407	0.711	180.6	381.9	0.422	1.001A	12.32	1.799	96.3	231.4	48.5	0.510
		5.48	13.08	18.55	TWO	1.048	312.6	0.0	95.8										
45620.0	45724.0	0.291	276.7	-54.1	-11.11	0.777	95.6	0.407	0.714	188.3	379.8	0.423	1.005A	17.55	1.801	95.7	235.9	60.7	0.619
		6.24	16.27	22.51	TWO	1.048	312.6	0.0	96.5										
45640.0	45724.0	0.398	264.4	6.3	14.46	0.827	108.2	0.436	0.751	207.5	378.6	0.424	1.079A	-7.65	1.820	95.6	233.0	-31.9	0.457
		8.39	11.54	19.93	ONE	1.048	312.6	0.0	98.8										
45650.0	45724.0	0.439	258.9	-10.4	6.88	0.885	115.6	0.478	0.808	219.2	380.5	0.422	1.194A	0.13	1.846	96.6	227.6	0.6	0.421
		9.31	10.53	19.84	ONE	1.048	312.6	0.0	95.0										
45660.0	45724.0	0.571	258.4	-16.4	4.59	0.980	123.6	0.555	0.940	232.0	383.3	0.418	1.463A	2.63	1.892	98.3	219.7	10.6	0.465
		12.46	11.79	24.25	ONE	1.048	312.6	0.0	87.1										
ARRIVAL DATE = 2445726.0																			
45560.0	45726.0	0.368	279.7	-26.2	-1.50	0.792	70.3	0.481	0.742	155.3	411.3	0.385	1.099	7.21	1.792	106.1	188.3	27.1	0.474
		7.74	12.05	19.80	TWO	1.081	319.0	0.0	54.6										
45570.0	45726.0	0.330	285.3	-26.4	-1.59	0.784	73.9	0.457	0.733	158.8	405.2	0.398	1.069	7.49	1.787	103.8	197.4	30.0	0.452
		6.97	11.40	18.37	TWO	1.081	319.0	0.0	63.1										
45580.0	45726.0	0.295	289.1	-26.8	-1.74	0.777	77.6	0.438	0.725	163.0	399.8	0.408	1.043	7.81	1.783	101.8	206.1	32.6	0.440
		6.31	11.06	17.37	TWO	1.081	319.0	0.0	70.9										
45590.0	45726.0	0.266	290.6	-27.9	-1.99	0.772	81.5	0.422	0.719	168.0	395.1	0.415	1.023	8.21	1.780	100.2	213.8	34.9	0.437
		5.78	10.98	16.76	TWO	1.081	319.0	0.0	77.6										
45600.0	45726.0	0.243	289.0	-30.0	-2.41	0.770	85.7	0.411	0.714	173.8	391.1	0.420	1.008	8.77	1.777	98.9	220.2	37.3	0.442
		5.40	11.11	16.52	TWO	1.081	319.0	0.0	83.0										
45610.0	45726.0	0.233	283.7	-33.4	-3.16	0.771	90.3	0.405	0.712	180.4	388.0	0.424	1.001A	9.65	1.776	98.0	225.0	40.3	0.456
		5.24	11.51	16.76	TWO	1.081	319.0	0.0	86.9										
45620.0	45726.0	0.245	275.1	-38.7	-4.81	0.779	95.5	0.404	0.716	188.2	385.9	0.426	1.005A	11.44	1.778	97.4	227.9	45.8	0.488
		5.44	12.45	17.89	TWO	1.081	319.0	0.0	89.2										
45630.0	45726.0	0.313	266.6	-51.2	-10.77	0.796	101.4	0.413	0.727	197.2	385.0	0.427	1.026A	17.53	1.784	97.2	228.4	60.6	0.611
		6.64	16.04	22.68	TWO	1.081	319.0	0.0	89.7										
45640.0	45726.0	0.596	272.5	22.0	32.60	0.828	107.9	0.433	0.752	207.4	384.7	0.427	1.077A	-25.72	1.797	97.4	226.6	-74.3	0.803
		13.10	21.67	34.77	ONE	1.081	319.0	0.0	89.4										
45650.0	45726.0	0.434	259.2	-10.4	6.81	0.883	115.3	0.474	0.806	218.9	386.5	0.424	1.188A	0.19	1.821	98.5	222.6	0.8	0.417
		9.18	10.39	19.57	ONE	1.081	319.0	0.0	83.7										
45660.0	45726.0	0.560	258.7	-17.4	3.83	0.974	123.1	0.549	0.930	231.4	389.0	0.419	1.440A	3.31	1.866	100.2	215.3	13.0	0.471
		12.18	11.96	24.14	ONE	1.081	319.0	0.0	76.7										
ARRIVAL DATE = 2445728.0																			
45560.0	45728.0	0.377	280.1	-24.6	-0.73	0.791	69.6	0.489	0.742	155.0	417.1	0.379	1.104	7.07	1.771	108.0	186.1	23.9	0.511
		7.93	13.12	21.06	TWO	1.113	325.1	0.0	46.4										
45570.0	45728.0	0.336	285.7	-24.4	-0.76	0.783	73.4	0.463	0.733	158.4	410.9	0.394	1.072	7.19	1.767	105.5	194.2	26.5	0.478
		7.09	12.15	19.25	TWO	1.113	325.1	0.0	54.1										
45580.0	45728.0	0.299	289.5	-24.3	-0.81	0.777	77.2	0.441	0.725	162.6	405.5	0.405	1.045	7.34	1.762	103.5	201.9	28.7	0.455
		6.38	11.50	17.89	TWO	1.113	325.1	0.0	61.3										
45590.0	45728.0	0.267	291.0	-24.6	-0.90	0.772	81.1	0.424	0.719	167.6	400.7	0.414	1.024	7.51	1.759	101.8	209.0	30.6	0.442
		5.81	11.11	16.92	TWO	1.113	325.1	0.0	67.7										
45600.0	45728.0	0.242	289.4	-25.6	-1.05	0.770	85.4	0.412	0.714	173.4	396.7	0.420	1.008	7.73	1.756	100.5	215.0	32.2	0.436
		5.39	10.93	16.32	TWO	1.113	325.1	0.0	73.1										
45610.0	45728.0	0.229	284.0	-27.2	-1.30	0.771	90.1	0.404	0.713	180.1	393.7	0.424	1.001A	8.05	1.755	99.5	219.5	33.8	0.436
		5.18	10.94	16.12	TWO	1.113	325.1	0.0	77.1										
45620.0	45728.0	0.234	275.4	-29.3	-1.79	0.779	95.2	0.403	0.716	187.8	391.6	0.427	1.004A	8.61	1.757	98.9	222.3	35.8	0.444
		5.26	11.17	16.43	TWO	1.113	325.1	0.0	79.7										
45630.0	45728.0	0.266	266.5	-32.3	-3.02	0.796	101.1	0.411	0.726	196.8	390.6	0.428	1.025A	9.90	1.763	98.8	222.9	39.9	0.468
		5.79	11.86	17.65	TWO	1.113	325.1	0.0	80.7										
45640.0	45728.0	0.362	260.7	-47.1	-10.74	0.826	107.6	0.431	0.750	206.9	390.8	0.427	1.074A	17.69	1.776	99.2	218.8	59.2	0.620
		7.63	16.29	23.92	TWO	1.113	325.1	0.0	81.7										
45650.0	45728.0	0.426	259.8	-10.6	6.62	0.879	114.8	0.471	0.801	218.2	391.9	0.424	1.179A	0.38	1.799	100.1	218.4	1.6	0.424
		9.02	10.60	19.62	ONE	1.113	325.1	0.0	73.3										
45660.0	45728.0	0.547	259.1	-19.2	2.57	0.965	122.5	0.542	0.915	230.4	394.1	0.419	1.411A	4.50	1.842	101.8	212.0	16.8	0.490
		11.86	12.52	24.38	ONE	1.113	325.1	0.0	67.9										
ARRIVAL DATE = 2445730.0																			
45560.0	45730.0	0.389	280.6	-23.1	0.00	0.790	68.7	0.500	0.741	154.6	422.6	0.371	1.111	7.00	1.753	109.8	185.0	21.1	0.558
		8.20	14.47	22.67	TWO	1.142	331.0	0.0	39.3										
45570.0	45730.0	0.345	286.2	-22.6	0.00	0.782	72.6	0.471	0.732	158.0	416.4	0.387	1.077	7.00	1.749	107.3	192.2	23.3	0.514
		7.28	13.21	20.49	TWO	1.142	331.0	0.0	46.2										
45580.0	45730.0	0.306	290.1	-22.1	0.00	0.776	76.5	0.447	0.725	162.1	410.9	0.401	1.048	7.00	1.745	105.1	199.1	25.2	0.483
		6.51	12.29	18.80	TWO	1.142	331.0	0.0	52.8										
45590.0	45730.0	0.272	291.7	-21.9	0.00	0.771	80.6	0.428	0.718	167.0	406.1	0.411	1.026	7.00	1.741	103.4	205.5	26.7	0.460
		5.89	11.64	17.53	TWO	1.142	331.0	0.0	58.7										
45600.0	45730.0	0.245	290.2	-22.1	0.00	0.769	84.9	0.414	0.714	172.8	402.1	0.418	1.009	7.00	1.739	102.0	211.0	27.7	0.445
		5.43	11.22	16.65	TWO	1.142	331.0	0.0	63.7										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45610.0	45730.0	0.229	285.0	-22.7	0.00	0.771	89.6	0.406	0.712	179.5	399.0	0.423	1.001	7.00	1.738	101.0	215.3	28.4	0.437
		5.18	10.98	16.17	TWO	1.142	331.0	0.0	67.5										
45620.0	45730.0	0.232	276.7	-23.3	0.01	0.778	94.8	0.404	0.715	187.2	396.8	0.426	1.003A	7.00	1.739	100.4	218.0	28.6	0.435
		5.22	10.92	16.14	TWO	1.142	331.0	0.0	69.9										
45630.0	45730.0	0.260	268.0	-23.4	0.01	0.794	100.6	0.410	0.725	196.1	395.7	0.427	1.022A	7.00	1.745	100.2	218.9	28.4	0.439
		5.68	11.03	16.71	TWO	1.142	331.0	0.0	70.7										
45640.0	45730.0	0.316	261.8	-23.2	0.02	0.823	107.1	0.429	0.747	206.1	395.8	0.426	1.068A	6.99	1.757	100.5	217.8	27.7	0.452
		6.71	11.40	18.11	TWO	1.142	331.0	0.0	69.5										
45650.0	45730.0	0.406	259.1	-24.2	-0.57	0.873	114.2	0.467	0.795	217.1	396.8	0.423	1.166A	7.58	1.779	101.5	214.3	28.3	0.485
		8.56	12.36	20.91	ONE	1.142	331.0	0.0	66.7										
45660.0	45730.0	0.533	259.7	-23.1	-0.02	0.955	121.9	0.535	0.898	229.0	398.6	0.418	1.379A	7.02	1.820	103.3	209.4	24.1	0.529
		11.51	13.64	25.16	ONE	1.142	331.0	0.0	61.4										
ARRIVAL DATE = 2445732.0																			
45560.0	45732.0	0.405	281.0	-21.8	0.71	0.789	67.5	0.513	0.740	154.3	428.0	0.360	1.119	7.02	1.739	111.8	184.7	18.8	0.612
		8.55	16.05	24.60	TWO	1.170	336.9	0.0	33.2										
45570.0	45732.0	0.358	286.9	-21.1	0.71	0.781	71.6	0.481	0.731	157.5	421.6	0.375	1.083	6.90	1.734	109.0	191.2	20.6	0.560
		7.54	14.52	22.07	TWO	1.170	336.9	0.0	39.4										
45580.0	45732.0	0.316	290.9	-20.3	0.74	0.774	75.7	0.455	0.723	161.5	416.0	0.394	1.053	6.77	1.730	106.7	197.4	22.1	0.519
		6.70	13.36	20.06	TWO	1.170	336.9	0.0	45.3										
45590.0	45732.0	0.280	292.7	-19.7	0.78	0.770	79.9	0.434	0.717	166.3	411.1	0.406	1.028	6.63	1.726	104.9	203.2	23.2	0.489
		6.03	12.49	18.51	TWO	1.170	336.9	0.0	50.6										
45600.0	45732.0	0.250	291.5	-19.3	0.87	0.767	84.3	0.419	0.712	172.0	407.1	0.414	1.011	6.47	1.724	103.4	208.2	23.8	0.468
		5.52	11.86	17.38	TWO	1.170	336.9	0.0	55.2										
45610.0	45732.0	0.233	286.6	-19.2	1.00	0.769	89.1	0.409	0.711	178.7	403.9	0.420	1.001	6.26	1.723	102.3	212.2	23.9	0.453
		5.23	11.44	16.68	TWO	1.170	336.9	0.0	58.7										
45620.0	45732.0	0.233	278.6	-19.1	1.23	0.776	94.3	0.406	0.713	186.3	401.7	0.424	1.002A	5.97	1.724	101.7	214.9	23.2	0.445
		5.24	11.22	16.45	TWO	1.170	336.9	0.0	60.9										
45630.0	45732.0	0.258	270.0	-18.5	1.65	0.791	100.0	0.411	0.722	195.0	400.5	0.425	1.019A	5.48	1.729	101.5	216.0	21.4	0.444
		5.65	11.17	16.83	TWO	1.170	336.9	0.0	61.5										
45640.0	45732.0	0.314	263.9	-16.7	2.66	0.818	106.5	0.429	0.743	204.9	400.4	0.424	1.062A	4.41	1.740	101.8	215.4	16.9	0.449
		6.66	11.32	17.98	TWO	1.170	336.9	0.0	60.1										
45650.0	45732.0	0.413	262.3	-8.8	7.44	0.865	113.5	0.465	0.787	215.8	401.2	0.421	1.152A	-0.44	1.762	102.8	213.2	-1.6	0.464
		8.72	11.76	20.48	TWO	1.170	336.9	0.0	56.3										
45660.0	45732.0	0.536	261.1	-36.4	-8.72	0.942	121.2	0.528	0.880	227.4	402.7	0.415	1.344A	15.66	1.799	104.5	204.4	45.1	0.664
		11.61	17.58	29.19	ONE	1.170	336.9	0.0	61.5										
ARRIVAL DATE = 2445734.0																			
45560.0	45734.0	0.425	281.5	-20.6	1.41	0.787	66.1	0.530	0.738	153.9	433.4	0.347	1.129	7.10	1.727	113.8	185.2	16.8	0.674
		8.99	17.86	26.85	TWO	1.196	342.5	0.0	27.9										
45570.0	45734.0	0.374	287.5	-19.7	1.40	0.779	70.4	0.494	0.730	156.9	426.7	0.369	1.090	6.86	1.722	110.8	191.1	18.3	0.612
		7.88	16.07	23.94	TWO	1.196	342.5	0.0	33.5										
45580.0	45734.0	0.329	291.8	-18.7	1.42	0.773	74.7	0.465	0.722	160.8	420.9	0.386	1.058	6.62	1.718	108.4	196.8	19.5	0.564
		6.96	14.66	21.62	TWO	1.196	342.5	0.0	38.8										
45590.0	45734.0	0.290	293.9	-17.7	1.48	0.768	79.0	0.442	0.715	165.5	416.0	0.399	1.032	6.37	1.714	106.4	202.0	20.2	0.527
		6.21	13.59	19.80	TWO	1.196	342.5	0.0	43.6										
45600.0	45734.0	0.258	293.1	-17.0	1.60	0.765	83.5	0.425	0.711	171.1	411.8	0.409	1.013	6.08	1.712	104.8	206.6	20.5	0.500
		5.65	12.78	18.43	TWO	1.196	342.5	0.0	47.7										
45610.0	45734.0	0.238	288.6	-16.5	1.80	0.766	88.3	0.413	0.709	177.6	408.5	0.416	1.001	5.73	1.710	103.7	210.3	20.2	0.480
		5.32	12.22	17.53	TWO	1.196	342.5	0.0	50.9										
45620.0	45734.0	0.235	281.0	-16.1	2.13	0.772	93.6	0.409	0.710	185.2	406.2	0.420	1.001A	5.26	1.711	103.0	212.9	19.1	0.468
		5.28	11.87	17.15	TWO	1.196	342.5	0.0	52.9										
45630.0	45734.0	0.258	272.4	-15.3	2.70	0.786	99.3	0.413	0.719	193.8	404.9	0.422	1.015A	4.55	1.716	102.7	214.1	16.6	0.464
		5.65	11.76	17.41	TWO	1.196	342.5	0.0	53.5										
45640.0	45734.0	0.311	266.1	-13.6	3.87	0.812	105.7	0.429	0.738	203.4	404.6	0.421	1.054A	3.26	1.727	103.0	213.9	11.7	0.470
		6.60	11.92	18.52	TWO	1.196	342.5	0.0	52.4										
45650.0	45734.0	0.403	263.8	-9.0	7.22	0.856	112.8	0.462	0.777	214.1	405.3	0.418	1.136A	-0.22	1.746	103.9	212.2	-0.7	0.492
		8.49	12.56	21.05	TWO	1.196	342.5	0.0	49.6										
ARRIVAL DATE = 2445736.0																			
45560.0	45736.0	0.449	282.0	-19.6	2.13	0.785	64.3	0.549	0.737	153.7	438.6	0.332	1.141	7.25	1.718	115.9	186.1	15.2	0.743
		9.53	19.89	29.42	TWO	1.221	348.1	0.0	23.4										
45570.0	45736.0	0.394	288.2	-18.5	2.07	0.777	69.0	0.510	0.728	156.4	431.8	0.356	1.100	6.89	1.713	112.7	191.7	16.4	0.672
		8.30	17.82	26.12	TWO	1.221	348.1	0.0	28.4										
45580.0	45736.0	0.345	292.9	-17.3	2.06	0.770	73.5	0.478	0.720	160.0	425.8	0.376	1.065	6.54	1.709	110.0	196.9	17.3	0.616
		7.28	16.18	23.46	TWO	1.221	348.1	0.0	33.2										
45590.0	45736.0	0.303	295.3	-16.1	2.12	0.765	77.9	0.453	0.713	164.6	420.6	0.390	1.036	6.18	1.705	107.9	201.7	17.8	0.573
		6.46	14.90	21.36	TWO	1.221	348.1	0.0	37.5										
45600.0	45736.0	0.269	294.9	-15.0	2.25	0.762	82.5	0.433	0.708	170.0	416.3	0.402	1.015	5.79	1.702	106.2	205.9	17.8	0.539
		5.83	13.93	19.76	TWO	1.221	348.1	0.0	41.2										
45610.0	45736.0	0.245	291.0	-14.3	2.47	0.763	87.4	0.420	0.706	176.4	412.9	0.410	1.002	5.33	1.701	105.0	209.4	17.3	0.515
		5.44	13.22	18.66	TWO	1.221	348.1	0.0	44.1										
45620.0	45736.0	0.239	283.8	-13.7	2.83	0.768	92.7	0.413	0.707	183.8	410.4	0.415	1.000A	4.75	1.701	104.2	211.9	15.9	0.499
		5.34	12.78	18.12	TWO	1.221	348.1	0.0	46.0										
45630.0	45736.0	0.258	275.4	-13.0	3.44	0.781	98.5	0.416	0.714	192.3	409.0	0.417	1.011A	3.94	1.706	103.8	213.3	13.3	0.493
		5.65	12.60	18.25	TWO	1.221	348.1	0.0	46.6										
45640.0	45736.0	0.307	268.7	-11.8	4.57	0.805	104.8	0.430	0.731	201.7	408.5	0.417	1.046A	2.61	1.715	104.1	213.4	8.7	0.499
		6.53	12.77	19.29	TWO	1.221	348.1	0.0	45.9										
45650.0	45736.0	0.392	265.7	-9.0	7.14	0.846	111.9	0.460	0.767	212.2	408.9	0.414	1.119A	-0.14	1.733	104.9	212.1	-0.5	0.523
		8.26	13.47	21.73	TWO	1.221	348.1	0.0	43.9										
45660.0	45736.0	0.559	268.5	1.8	17.40	0.913	119.5	0.515	0.840	223.3	410.2	0.407	1.273A	-10.58	1.766	106.6	207.2	-29.1	0.640
		12.16	16.86	29.02	TWO	1.221	348.1	0.0	47.3										
ARRIVAL DATE = 2445738.0																			
45560.0	45738.0	0.477	282.3	-18.8	2.88	0.783	62.3	0.573	0.735	153.5	444.0	0.314	1.156	7.48	1.712	118.2	187.4	13.8	0.820
		10.19	22.16	32.34	TWO	1.243	353.7	0.0	19.4										
45570.0	45738.0	0.417	289.0	-17.6	2.74	0.775	67.3	0.530	0.726	155.9	436.8	0.342	1.111	6.99	1.707	114.7	192.7	14.8	0.740
		8.81	19.80	28.61	TWO	1.243	353.7	0.0	23.9										
45580.0	45738.0	0.365	293.9	-16.1	2.69	0.768	72.0	0.494	0.718	159.3	430.5	0.363	1.073	6.53	1.703	111.8	197.6	15.4	0.675
		7.68	17.91	25.59	TWO	1.243	353.7	0.0	28.2										
45590.0	45738.0	0.319	296.8	-14.7	2.72	0.762	76.6	0.465	0.711	163.6	425.1	0.380	1.042	6.07	1.699	109.4	202.1	15.7	0.624
		6.76	16.42	23.18	TWO	1.243	353.7	0.0	32.2										
45600.0	45738.0	0.281	297.0	-13.4	2.84	0.759	81.4	0.443	0.706	168.8	420.6	0.393	1.019	5.58	1.696	107.6	206.1	15.6	0.585
		6.06	15.27	21.33	TWO	1.243	353.7	0.0	35.6										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45610.0	45738.0	0.255	293.8	-12.4	3.05	0.759	86.3	0.428	0.703	175.0	417.1	0.402	1.004	5.03	1.694	106.2	209.4	14.9	0.556
		5.59	14.42	20.02	TWO	1.243	353.7	0.0	38.3										
45620.0	45738.0	0.245	287.1	-11.7	3.41	0.763	91.6	0.419	0.703	182.3	414.4	0.408	0.999A	4.37	1.694	105.3	211.8	13.4	0.537
		5.43	13.87	19.30	TWO	1.243	353.7	0.0	40.1										
45630.0	45738.0	0.259	278.7	-11.2	4.01	0.775	97.4	0.420	0.709	190.5	412.8	0.412	1.007A	3.50	1.698	104.9	213.3	10.9	0.529
		5.66	13.63	19.29	TWO	1.243	353.7	0.0	40.8										
45640.0	45738.0	0.302	271.7	-10.4	5.05	0.797	103.8	0.432	0.724	199.8	412.1	0.412	1.037A	2.20	1.706	105.1	213.6	6.8	0.534
		6.44	13.77	20.21	TWO	1.243	353.7	0.0	40.4										
45650.0	45738.0	0.381	268.0	-8.8	7.11	0.835	110.8	0.459	0.756	210.0	412.3	0.409	1.102A	-0.11	1.723	105.8	212.7	-0.3	0.557
		8.03	14.46	22.49	TWO	1.243	353.7	0.0	39.0										
45660.0	45738.0	0.511	268.6	-3.7	12.65	0.897	118.4	0.509	0.820	220.9	413.3	0.403	1.237A	-5.90	1.753	107.4	210.0	-15.9	0.627
		10.99	16.51	27.50	TWO	1.243	353.7	0.0	39.2										
								ARRIVAL DATE = 2445740.0											
45560.0	45740.0	0.510	282.6	-18.0	3.67	0.781	59.9	0.600	0.734	153.4	449.4	0.294	1.173	7.79	1.709	120.8	189.0	12.7	0.906
		10.98	24.69	35.67	TWO	1.264	359.2	0.0	16.0										
45570.0	45740.0	0.445	285.6	-16.7	3.44	0.773	65.2	0.552	0.724	155.4	441.8	0.324	1.124	7.15	1.704	116.9	194.1	13.4	0.815
		9.43	22.00	31.44	TWO	1.264	359.2	0.0	20.0										
45580.0	45740.0	0.388	295.0	-15.2	3.33	0.765	70.2	0.513	0.716	158.5	435.2	0.349	1.083	6.57	1.700	113.7	198.8	13.9	0.741
		8.17	19.84	28.01	TWO	1.264	359.2	0.0	23.9										
45590.0	45740.0	0.338	298.4	-13.6	3.31	0.759	75.1	0.481	0.709	162.5	429.6	0.368	1.049	6.01	1.695	111.1	203.1	14.0	0.683
		7.14	18.13	25.27	TWO	1.264	359.2	0.0	27.5										
45600.0	45740.0	0.297	299.2	-12.1	3.39	0.755	80.0	0.456	0.703	167.6	424.9	0.383	1.023	5.43	1.692	109.1	206.9	13.8	0.637
		6.34	16.79	23.13	TWO	1.264	359.2	0.0	30.7										
45610.0	45740.0	0.266	296.7	-10.9	3.57	0.754	85.0	0.438	0.700	173.6	421.1	0.393	1.006	4.81	1.690	107.5	210.0	13.0	0.603
		5.79	15.79	21.59	TWO	1.264	359.2	0.0	33.2										
45620.0	45740.0	0.252	290.8	-10.1	3.91	0.758	90.4	0.427	0.699	180.6	418.2	0.401	0.998A	4.09	1.690	106.5	212.4	11.5	0.580
		5.54	15.12	20.66	TWO	1.264	359.2	0.0	34.9										
45630.0	45740.0	0.260	282.6	-9.7	4.46	0.768	96.3	0.425	0.704	188.6	416.4	0.405	1.003A	3.18	1.693	106.0	213.9	9.1	0.569
		5.68	14.80	20.48	TWO	1.264	359.2	0.0	35.8										
45640.0	45740.0	0.298	275.1	-9.3	5.39	0.788	102.7	0.434	0.717	197.6	415.5	0.405	1.028A	1.92	1.700	106.0	214.5	5.5	0.572
		6.36	14.88	21.24	TWO	1.264	359.2	0.0	35.6										
45650.0	45740.0	0.370	270.7	-8.5	7.08	0.823	109.7	0.458	0.744	207.6	415.5	0.403	1.085A	-0.09	1.715	106.7	214.0	-0.2	0.594
		7.79	15.52	23.31	TWO	1.264	359.2	0.0	34.8										
45660.0	45740.0	0.484	270.1	-5.8	10.81	0.880	117.3	0.503	0.800	218.3	416.2	0.397	1.203A	-4.12	1.742	108.1	212.1	-10.5	0.650
		10.35	17.17	27.52	TWO	1.264	359.2	0.0	34.4										
								ARRIVAL DATE = 2445742.0											
45560.0	45742.0	0.549	282.8	-17.5	4.55	0.780	57.2	0.631	0.732	153.6	455.0	0.270	1.194	8.21	1.710	123.6	190.8	11.7	1.001
		11.92	27.52	39.44	TWO	1.283	4.7	0.0	13.2										
45570.0	45742.0	0.477	290.2	-16.1	4.18	0.770	62.9	0.578	0.722	155.1	447.0	0.304	1.140	7.39	1.704	119.3	195.8	12.3	0.898
		10.18	24.46	34.65	TWO	1.283	4.7	0.0	16.5										
45580.0	45742.0	0.415	296.0	-14.4	3.97	0.762	68.2	0.535	0.714	157.8	440.0	0.332	1.095	6.68	1.699	115.7	200.4	12.6	0.814
		8.76	22.00	30.76	TWO	1.283	4.7	0.0	20.0										
45590.0	45742.0	0.361	295.9	-12.6	3.88	0.756	73.3	0.499	0.706	161.5	434.0	0.354	1.058	6.01	1.695	112.9	204.5	12.6	0.748
		7.60	20.03	27.64	TWO	1.283	4.7	0.0	23.4										
45600.0	45742.0	0.316	301.4	-11.0	3.91	0.751	78.3	0.471	0.700	166.2	429.0	0.371	1.029	5.34	1.691	110.6	208.2	12.2	0.695
		6.70	18.49	25.19	TWO	1.283	4.7	0.0	26.3										
45610.0	45742.0	0.281	295.8	-9.6	4.06	0.749	83.5	0.450	0.696	172.0	425.0	0.383	1.009	4.65	1.689	108.9	211.2	11.4	0.655
		6.05	17.32	23.37	TWO	1.283	4.7	0.0	28.7										
45620.0	45742.0	0.261	294.7	-8.7	4.35	0.751	89.0	0.437	0.695	178.7	421.9	0.391	0.998	3.87	1.688	107.7	213.6	10.0	0.628
		5.70	16.52	22.21	TWO	1.283	4.7	0.0	30.4										
45630.0	45742.0	0.263	286.8	-8.4	4.84	0.760	94.9	0.432	0.698	186.5	419.8	0.396	1.000A	2.93	1.690	107.0	215.2	7.8	0.613
		5.73	16.08	21.82	TWO	1.283	4.7	0.0	31.4										
45640.0	45742.0	0.294	279.0	-8.3	5.66	0.778	101.3	0.438	0.709	195.3	418.6	0.398	1.020A	1.71	1.697	107.0	215.9	4.5	0.613
		6.29	16.08	22.37	TWO	1.283	4.7	0.0	31.5										
45650.0	45742.0	0.359	273.8	-8.1	7.07	0.810	108.4	0.459	0.733	205.0	418.4	0.396	1.069A	-0.07	1.710	107.5	215.7	-0.2	0.632
		7.56	16.63	24.19	TWO	1.283	4.7	0.0	31.0										
45660.0	45742.0	0.462	272.3	-6.8	9.81	0.863	116.0	0.499	0.781	215.5	418.9	0.391	1.171A	-3.18	1.735	108.8	214.4	-7.7	0.680
		9.84	18.06	27.90	TWO	1.283	4.7	0.0	30.6										
								ARRIVAL DATE = 2445744.0											
45560.0	45744.0	0.594	282.7	-17.0	5.54	0.778	53.9	0.667	0.730	154.1	461.0	0.244	1.217	8.77	1.713	126.8	192.6	10.9	1.108
		13.04	30.68	43.72	TWO	1.301	10.3	0.0	11.1										
45570.0	45744.0	0.515	290.6	-15.6	4.98	0.768	60.1	0.609	0.720	155.0	452.3	0.282	1.159	7.73	1.707	121.9	197.7	11.3	0.991
		11.08	27.21	38.29	TWO	1.301	10.3	0.0	13.5										
45580.0	45744.0	0.446	297.0	-13.8	4.64	0.759	65.8	0.560	0.711	157.2	444.9	0.313	1.110	6.85	1.702	118.0	202.2	11.5	0.896
		9.47	24.41	33.88	TWO	1.301	10.3	0.0	16.6										
45590.0	45744.0	0.388	301.5	-11.9	4.47	0.752	71.2	0.520	0.703	160.5	438.5	0.337	1.069	6.06	1.697	114.8	206.3	11.4	0.820
		8.17	22.16	30.32	TWO	1.301	10.3	0.0	19.6										
45600.0	45744.0	0.338	303.7	-10.1	4.43	0.746	76.5	0.488	0.697	164.9	433.2	0.356	1.037	5.30	1.693	112.3	209.9	11.0	0.759
		7.13	20.38	27.51	TWO	1.301	10.3	0.0	22.4										
45610.0	45744.0	0.298	303.0	-8.5	4.51	0.744	81.8	0.464	0.692	170.3	428.8	0.371	1.013	4.53	1.691	110.3	212.9	10.1	0.713
		6.36	19.02	25.38	TWO	1.301	10.3	0.0	24.7										
45620.0	45744.0	0.272	298.7	-7.5	4.75	0.745	87.4	0.448	0.690	176.8	425.5	0.381	0.999	3.71	1.689	109.0	215.3	8.7	0.680
		5.90	18.05	23.95	TWO	1.301	10.3	0.0	26.4										
45630.0	45744.0	0.268	291.5	-7.2	5.17	0.752	93.4	0.441	0.692	184.3	423.1	0.387	0.997A	2.75	1.691	108.1	216.9	6.7	0.661
		5.81	17.49	23.30	TWO	1.301	10.3	0.0	27.4										
45640.0	45744.0	0.291	283.4	-7.4	5.88	0.767	99.8	0.444	0.701	192.8	421.7	0.390	1.012A	1.56	1.696	107.9	217.8	3.8	0.657
		6.24	17.37	23.61	TWO	1.301	10.3	0.0	27.8										
45650.0	45744.0	0.348	277.4	-7.7	7.06	0.796	106.9	0.461	0.721	202.3	421.2	0.389	1.053A	-0.06	1.708	108.3	217.9	-0.2	0.672
		7.34	17.82	25.16	TWO	1.301	10.3	0.0	27.6										
45660.0	45744.0	0.442	274.9	-7.3	9.18	0.844	114.6	0.496	0.762	212.5	421.5	0.384	1.140A	-2.61	1.730	109.4	217.0	-6.0	0.714
		9.37	19.06	28.43	TWO	1.301	10.3	0.0	27.3										
								ARRIVAL DATE = 2445746.0											
45570.0	45746.0	0.558	290.9	-15.2	5.87	0.765	57.0	0.644	0.718	155.1	458.0	0.256	1.181	8.17	1.713	125.0	199.7	10.5	1.095
		12.15	30.30	42.45	TWO	1.317	15.8	0.0	11.2										
45580.0	45746.0	0.483	297.8	-13.4	5.37	0.756	63.1	0.590	0.709	156.7	450.0	0.291	1.127	7.10	1.708	120.5	204.3	10.6	0.987
		10.33	27.10	37.43	TWO	1.317	15.8	0.0	13.5										
45590.0	45746.0	0.419	302.9	-11.3	5.07	0.748	68.8	0.545	0.700	159.6	443.2	0.318	1.082	6.17	1.703	117.0	208.4	10.5	0.900
		8.85	24.52	33.37	TWO	1.317	15.8	0.0	16.2										
45600.0	45746.0	0.364	305.9	-9.3	4.94	0.742	74.3	0.509	0.693	163.6	437.4	0.340	1.046	5.31	1.699	114.1	211.9	10.0	0.830
		7.66	22.47	30.13	TWO	1.317	15.8	0.0	18.8										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45610.0	45746.0	0.319	306.1	-7.6	4.96	0.738	79.8	0.482	0.688	168.6	432.7	0.357	1.019	4.47	1.695	111.9	214.9	9.1	0.777
		6.75	20.89	27.64	TWO	1.317	15.8	0.0	21.0										
45620.0	45746.0	0.287	302.9	-6.5	5.12	0.738	85.5	0.462	0.685	174.8	429.0	0.368	1.002	3.59	1.693	110.3	217.3	7.7	0.738
		6.16	19.74	25.90	TWO	1.317	15.8	0.0	22.8										
45630.0	45746.0	0.275	296.4	-6.1	5.47	0.743	91.6	0.452	0.686	181.9	426.3	0.376	0.996A	2.61	1.694	109.3	219.1	5.9	0.713
		5.94	19.02	24.96	TWO	1.317	15.8	0.0	23.9										
45640.0	45746.0	0.290	288.3	-6.4	6.06	0.756	98.2	0.451	0.693	190.2	424.6	0.380	1.005A	1.44	1.698	108.9	220.1	3.3	0.705
		6.21	18.77	24.98	TWO	1.317	15.8	0.0	24.5										
45650.0	45746.0	0.338	281.5	-7.1	7.05	0.781	105.3	0.464	0.709	199.4	423.9	0.380	1.039A	-0.06	1.708	109.1	220.4	-0.1	0.715
		7.14	19.08	26.22	TWO	1.317	15.8	0.0	24.5										
45660.0	45746.0	0.423	278.1	-7.4	8.73	0.825	113.1	0.494	0.744	209.4	423.9	0.377	1.112A	-2.23	1.727	110.0	219.8	-4.8	0.751
		8.94	20.13	29.07	TWO	1.317	15.8	0.0	24.4										
ARRIVAL DATE = 2445748.0																			
45580.0	45748.0	0.526	298.4	-13.1	6.17	0.753	59.9	0.624	0.706	156.5	455.4	0.266	1.147	7.45	1.717	123.4	206.5	9.8	1.089
		11.36	30.12	41.48	TWO	1.331	21.5	0.0	11.0										
45590.0	45748.0	0.455	304.2	-10.9	5.72	0.744	66.0	0.574	0.697	158.8	448.1	0.297	1.098	6.36	1.711	119.4	210.6	9.6	0.990
		9.67	27.17	36.84	TWO	1.331	21.5	0.0	13.2										
45600.0	45748.0	0.394	307.9	-8.8	5.47	0.737	71.8	0.534	0.690	162.4	441.9	0.321	1.058	5.38	1.707	116.2	214.2	9.1	0.910
		8.30	24.81	33.11	TWO	1.331	21.5	0.0	15.5										
45610.0	45748.0	0.343	309.1	-6.9	5.40	0.732	77.5	0.502	0.684	167.0	436.7	0.340	1.027	4.44	1.703	113.7	217.2	8.2	0.847
		7.24	22.96	30.21	TWO	1.331	21.5	0.0	17.7										
45620.0	45748.0	0.305	307.1	-5.6	5.48	0.730	83.4	0.479	0.680	172.7	432.6	0.354	1.005	3.51	1.701	111.8	219.7	6.9	0.801
		6.50	21.60	28.09	TWO	1.331	21.5	0.0	19.4										
45630.0	45748.0	0.285	301.5	-5.0	5.74	0.733	89.6	0.465	0.679	179.5	429.6	0.364	0.995	2.50	1.700	110.5	221.5	5.2	0.770
		6.13	20.69	26.82	TWO	1.331	21.5	0.0	20.6										
45640.0	45748.0	0.291	293.6	-5.5	6.23	0.744	96.3	0.461	0.684	187.4	427.5	0.369	1.000A	1.36	1.703	109.9	222.7	2.9	0.756
		6.24	20.27	26.51	TWO	1.331	21.5	0.0	21.4										
45650.0	45748.0	0.330	286.2	-6.4	7.04	0.766	103.5	0.469	0.698	196.3	426.5	0.370	1.025A	-0.05	1.712	109.9	223.2	-0.1	0.761
		6.97	20.42	27.39	TWO	1.331	21.5	0.0	21.7										
45660.0	45748.0	0.405	281.7	-7.3	8.39	0.806	111.3	0.494	0.727	206.1	426.3	0.368	1.086A	-1.96	1.728	110.7	222.9	-4.0	0.790
		8.54	21.29	29.83	TWO	1.331	21.5	0.0	21.8										
ARRIVAL DATE = 2445750.0																			
45580.0	45750.0	0.575	298.9	-13.0	7.07	0.750	56.2	0.663	0.704	156.7	461.3	0.238	1.171	7.93	1.729	126.7	208.7	9.1	1.205
		12.57	33.54	46.11	TWO	1.344	27.3	0.0	9.2										
45590.0	45750.0	0.497	305.3	-10.7	6.42	0.740	62.7	0.608	0.695	158.3	453.3	0.272	1.117	6.62	1.723	122.2	213.0	8.9	1.090
		10.65	30.15	40.80	TWO	1.344	27.3	0.0	10.5										
45600.0	45750.0	0.429	309.8	-8.5	6.03	0.732	68.9	0.562	0.686	161.3	446.5	0.300	1.072	5.50	1.718	118.5	216.6	8.3	0.998
		9.08	27.42	36.51	TWO	1.344	27.3	0.0	12.5										
45610.0	45750.0	0.372	312.0	-6.4	5.85	0.725	74.9	0.526	0.679	165.4	440.9	0.322	1.037	4.46	1.714	115.6	219.8	7.5	0.925
		7.84	25.27	33.12	TWO	1.344	27.3	0.0	14.5										
45620.0	45750.0	0.328	311.1	-4.8	5.84	0.722	81.0	0.499	0.675	170.7	436.4	0.338	1.011	3.46	1.711	113.4	222.3	6.3	0.870
		6.93	23.65	30.58	TWO	1.344	27.3	0.0	16.3										
45630.0	45750.0	0.300	306.7	-4.1	6.00	0.724	87.3	0.480	0.673	177.1	432.9	0.350	0.996	2.43	1.710	111.9	224.3	4.6	0.832
		6.39	22.52	28.91	TWO	1.344	27.3	0.0	17.6										
45640.0	45750.0	0.296	299.4	-4.5	6.38	0.732	94.1	0.472	0.676	184.6	430.5	0.357	0.995A	1.29	1.712	111.0	225.6	2.5	0.811
		6.32	21.91	28.23	TWO	1.344	27.3	0.0	18.5										
45650.0	45750.0	0.324	291.5	-5.6	7.03	0.751	101.5	0.476	0.687	193.2	429.1	0.359	1.014A	-0.05	1.718	110.8	226.3	-0.1	0.810
		6.85	21.87	28.72	TWO	1.344	27.3	0.0	19.0										
45660.0	45750.0	0.388	285.9	-6.9	8.11	0.786	109.4	0.496	0.711	202.7	428.6	0.358	1.063A	-1.76	1.732	111.4	226.3	-3.4	0.832
		8.18	22.53	30.71	TWO	1.344	27.3	0.0	19.3										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2446054.0											
45920.0	46054.0	0.500	266.3	-1.1	16.54	0.728	66.0	0.586	0.693	160.1	317.3	0.287D	1.100	-18.27	2.202	74.5	209.0	-39.9	1.037
		10.73	28.57	39.30	ONE	0.712	216.1	0.0	139.6										
45930.0	46054.0	0.460	272.3	-6.2	11.99	0.705	68.5	0.590	0.676	163.1	310.9	0.277D	1.076	-13.15	2.194	72.2	208.4	-28.4	0.999
		9.78	27.46	37.24	ONE	0.712	216.1	0.0	150.7										
45940.0	46054.0	0.435	277.0	-9.0	9.58	0.681	71.4	0.596	0.660	166.3	304.6	0.267D	1.053	-10.15	2.185	69.9	209.9	-20.7	1.023
		9.21	28.15	37.36	ONE	0.712	216.1	0.0	158.4										
45950.0	46054.0	0.417	280.4	-10.6	8.16	0.657	75.2	0.603	0.644	169.7	298.5	0.255D	1.032	-8.09	2.177	67.6	211.8	-15.4	1.069
		8.80	29.51	38.31	ONE	0.712	216.1	0.0	164.0										
45960.0	46054.0	0.404	281.9	-11.7	7.28	0.633	80.1	0.613	0.629	173.6	292.7	0.244D	1.015	-6.52	2.168	65.4	213.8	-11.5	1.124
		8.52	31.14	39.66	ONE	0.712	216.1	0.0	168.3										
45970.0	46054.0	0.399	281.1	-12.6	6.74	0.614	86.6	0.624	0.618	177.9	287.4	0.232D	1.003	-5.21	2.161	63.3	215.7	-8.5	1.182
		8.42	32.87	41.28	ONE	0.712	216.1	0.0	171.5										
45980.0	46054.0	0.409	277.8	-13.7	6.44	0.605	95.2	0.638	0.612	183.0	282.6	0.221D	1.002A	-4.05	2.158	61.3	217.4	-6.2	1.241
		8.64	34.63	43.27	ONE	0.712	216.1	0.0	173.7										
45990.0	46054.0	0.447	272.2	-15.0	6.35	0.619	106.3	0.657	0.616	189.0	278.9	0.211D	1.020A	-2.94	2.160	59.5	218.6	-4.2	1.301
		9.49	36.39	45.88	ONE	0.712	216.1	0.0	175.1										
46000.0	46054.0	0.532	265.6	-16.2	6.45	0.678	119.6	0.684	0.644	196.7	276.6	0.204D	1.084A	-1.83	2.177	57.8	219.3	-2.5	1.362
		11.50	38.21	49.71	ONE	0.712	216.1	0.0	176.0										
								ARRIVAL DATE = 2446056.0											
45930.0	46056.0	0.485	270.2	4.1	19.32	0.718	70.5	0.561	0.685	162.9	321.9	0.301D	1.069	-19.73	2.164	76.5	219.4	-43.0	1.042
		10.37	28.74	39.10	ONE	0.743	227.7	0.0	136.4										
45940.0	46056.0	0.429	275.4	-1.8	13.61	0.698	73.6	0.563	0.670	166.3	316.1	0.293D	1.047	-13.43	2.156	74.5	217.4	-29.8	0.970
		9.07	26.58	35.65	ONE	0.743	227.7	0.0	148.6										
45950.0	46056.0	0.397	278.6	-5.2	10.70	0.678	77.5	0.567	0.656	170.1	310.3	0.284D	1.027	-9.88	2.148	72.5	218.3	-21.1	0.975
		8.37	26.75	35.12	ONE	0.743	227.7	0.0	157.0										
45960.0	46056.0	0.377	279.5	-7.4	9.00	0.660	82.5	0.572	0.643	174.3	305.0	0.275D	1.012	-7.51	2.142	70.5	219.9	-15.2	1.008
		7.95	27.70	35.65	ONE	0.743	227.7	0.0	163.0										
45970.0	46056.0	0.369	278.0	-9.2	7.96	0.647	88.8	0.581	0.634	179.1	300.1	0.266D	1.003	-5.73	2.136	68.7	221.5	-10.9	1.049
		7.77	28.94	36.72	ONE	0.743	227.7	0.0	167.4										
45980.0	46056.0	0.379	273.7	-11.0	7.32	0.645	96.9	0.592	0.631	184.8	296.0	0.258D	1.005A	-4.28	2.135	67.1	222.9	-7.7	1.094
		7.97	30.25	38.23	ONE	0.743	227.7	0.0	170.9										
45990.0	46056.0	0.418	267.4	-12.8	6.95	0.666	106.9	0.608	0.640	191.7	293.1	0.251D	1.029A	-3.00	2.140	65.7	223.8	-5.2	1.137
		8.84	31.54	40.38	ONE	0.743	227.7	0.0	173.5										
46000.0	46056.0	0.506	260.7	-14.5	6.82	0.729	118.7	0.634	0.675	200.5	292.1	0.247D	1.103A	-1.80	2.159	64.6	223.9	-3.0	1.180
		10.86	32.81	43.67	ONE	0.743	227.7	0.0	175.1										
								ARRIVAL DATE = 2446058.0											
45940.0	46058.0	0.468	272.6	8.7	21.16	0.712	75.5	0.535	0.679	166.6	326.8	0.316D	1.042	-20.30	2.121	78.6	228.2	-45.0	1.020
		9.97	28.07	38.04	ONE	0.781	238.7	0.0	134.0										
45950.0	46058.0	0.398	276.3	2.3	14.58	0.696	79.5	0.535	0.667	170.6	321.7	0.310D	1.023	-13.10	2.114	76.8	225.1	-30.5	0.920
		8.39	25.11	33.50	ONE	0.781	238.7	0.0	146.9										
45960.0	46058.0	0.364	276.9	-1.8	11.30	0.683	84.5	0.538	0.656	175.2	316.8	0.303D	1.009	-9.18	2.109	75.2	225.5	-20.9	0.911
		7.66	24.85	32.51	ONE	0.781	238.7	0.0	155.4										
45970.0	46058.0	0.350	274.6	-4.9	9.43	0.675	90.6	0.543	0.650	180.5	312.5	0.297D	1.002A	-6.61	2.105	73.7	226.7	-14.5	0.931
		7.37	25.43	32.80	ONE	0.781	238.7	0.0	161.2										
45980.0	46058.0	0.358	269.5	-7.8	8.28	0.679	98.3	0.552	0.650	186.8	309.1	0.291D	1.008A	-4.72	2.105	72.4	227.7	-9.9	0.959
		7.54	26.26	33.80	ONE	0.781	238.7	0.0	165.2										
45990.0	46058.0	0.400	262.7	-10.4	7.57	0.706	107.6	0.567	0.663	194.6	307.0	0.287D	1.039A	-3.18	2.112	71.3	228.1	-6.5	0.987
		8.43	27.11	35.54	ONE	0.781	238.7	0.0	167.6										
46000.0	46058.0	0.490	256.3	-12.9	7.17	0.771	118.3	0.596	0.705	204.5	307.0	0.285D	1.126A	-1.84	2.134	70.7	227.6	-3.7	1.014
		10.50	27.91	38.41	ONE	0.781	238.7	0.0	168.3										
								ARRIVAL DATE = 2446060.0											
45920.0	46060.0	0.594	250.6	-62.2	-32.04	0.754	71.1	0.516	0.712	160.0	353.1	0.345D	1.079	32.35	2.094	87.7	248.4	70.3	1.189
		13.05	33.09	46.13	TWO	0.822	249.1	0.0	109.7										
45950.0	46060.0	0.446	273.2	12.4	21.79	0.711	81.1	0.509	0.676	171.2	332.2	0.332D	1.020	-19.71	2.076	80.7	234.8	-45.8	0.964
		9.47	26.40	35.87	ONE	0.822	249.1	0.0	132.5										
45960.0	46060.0	0.370	274.2	5.4	14.78	0.701	86.1	0.509	0.668	176.2	328.0	0.328D	1.007	-12.10	2.072	79.3	231.1	-30.1	0.850
		7.80	23.06	30.86	ONE	0.822	249.1	0.0	145.3										
45970.0	46060.0	0.342	271.4	0.2	11.37	0.698	92.1	0.512	0.663	182.0	324.3	0.323D	1.003A	-8.04	2.069	78.1	231.1	-19.9	0.832
		7.23	22.50	29.73	ONE	0.822	249.1	0.0	153.4										
45980.0	46060.0	0.347	265.6	-4.1	9.43	0.707	99.5	0.520	0.666	189.0	321.5	0.320D	1.013A	-5.42	2.071	77.1	231.6	-13.1	0.840
		7.32	22.74	30.06	ONE	0.822	249.1	0.0	158.2										
45990.0	46060.0	0.390	258.6	-8.0	8.25	0.738	108.2	0.535	0.684	197.5	320.3	0.318D	1.050A	-3.50	2.080	76.4	231.5	-8.3	0.854
		8.22	23.16	31.38	ONE	0.822	249.1	0.0	160.6										
46000.0	46060.0	0.483	252.6	-11.3	7.53	0.806	118.2	0.567	0.733	208.3	321.2	0.318D	1.149A	-1.96	2.104	76.2	230.3	-4.6	0.868
		10.32	23.57	33.89	ONE	0.822	249.1	0.0	160.6										
								ARRIVAL DATE = 2446062.0											
45920.0	46062.0	0.447	261.3	-53.3	-18.05	0.759	71.9	0.502	0.716	159.9	361.9	0.357	1.076	18.97	2.052	90.7	221.7	59.9	0.771
		9.48	20.72	30.20	TWO	0.865	258.9	0.0	113.6										
45930.0	46062.0	0.557	258.3	-64.3	-30.56	0.746	75.2	0.494	0.704	163.6	356.8	0.356D	1.052	32.05	2.047	88.9	254.7	71.2	1.147
		12.11	31.84	43.94	TWO	0.865	258.9	0.0	108.8										
45960.0	46062.0	0.419	271.5	14.5	21.10	0.717	87.4	0.486	0.677	177.2	338.4	0.348D	1.006	-17.91	2.033	83.0	238.8	-45.1	0.875
		8.86	23.79	32.65	ONE	0.865	258.9	0.0	131.5										
45970.0	46062.0	0.352	268.7	6.6	14.24	0.717	93.4	0.488	0.675	183.5	335.4	0.346D	1.004A	-10.46	2.032	82.0	235.1	-28.5	0.764
		7.42	20.52	27.94	ONE	0.865	258.9	0.0	143.5										
45980.0	46062.0	0.346	262.4	-0.1	10.93	0.730	100.5	0.495	0.681	191.1	333.3	0.344D	1.018A	-6.52	2.035	81.2	234.5	-18.0	0.740
		7.29	19.81	27.10	ONE	0.865	258.9	0.0	150.0										
45990.0	46062.0	0.387	255.3	-5.5	9.06	0.763	108.8	0.511	0.702	200.3	332.8	0.343D	1.061A	-3.99	2.046	80.9	233.8	-11.0	0.738
		8.14	19.76	27.90	ONE	0.865	258.9	0.0	152.8										
46000.0	46062.0	0.480	249.6	-9.8	7.92	0.832	118.1	0.546	0.758	211.6	334.3	0.344D	1.171A	-2.14	2.071	81.0	231.7	-5.9	0.741
		10.25	19.84	30.09	ONE	0.865	258.9	0.0	152.3										
								ARRIVAL DATE = 2446064.0											
45920.0	46064.0	0.394	264.2	-46.5	-12.26	0.763	72.6	0.491	0.720	160.0	370.7	0.366	1.073	13.76	2.011	93.5	213.9	52.6	0.601
		8.30	15.72	24.03	TWO	0.909	268.0	0.0	110.8										
45930.0	46064.0	0.412	267.1	-55.1	-17.25	0.752	75.9	0.481	0.709	163.7	365.2	0.368	1.050	19.31	2.006	91.7	227.5	61.1	0.757
		8.69	20.31	29.00	TWO	0.909	268.0	0.0	111.6										
45940.0	46064.0	0.530	263.1	-66.6	-29.87	0.741	79.7	0.473	0.699	168.1	360.7	0.368	1.030	32.46	2.001	90.2	262.1	72.8	1.124
		11.45	31.14	42.59	TWO	0.909	268.0	0.0	107.1										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45960.0	46064.0	0.599	269.0	23.1	36.69	0.729	88.3	0.467	0.686	178.1	347.6	0.365D	1.006	-33.04	1.994	86.1	266.4	-66.4	1.183
		13.18	32.91	46.09	ONE	0.909	268.0	0.0	113.6										
45970.0	46064.0	0.393	266.9	14.3	19.27	0.732	94.3	0.468	0.685	184.9	345.7	0.364D	1.006A	-15.08	1.993	85.5	239.9	-42.6	0.763
		8.29	20.50	28.79	ONE	0.909	268.0	0.0	130.5										
45980.0	46064.0	0.355	260.2	4.8	13.08	0.747	101.2	0.475	0.693	193.0	344.3	0.364D	1.023A	-8.33	1.998	84.9	236.5	-25.6	0.668
		7.49	17.69	25.17	ONE	0.909	268.0	0.0	140.3										
45990.0	46064.0	0.388	252.8	-2.9	10.08	0.783	109.2	0.493	0.717	202.6	344.3	0.364D	1.071A	-4.74	2.010	84.8	234.7	-14.9	0.643
		8.18	16.95	25.13	ONE	0.909	268.0	0.0	143.9										
46000.0	46064.0	0.480	247.5	-8.5	8.38	0.852	118.1	0.531	0.778	214.4	346.2	0.364D	1.191A	-2.42	2.037	85.2	231.6	-7.7	0.636
		10.25	16.75	26.99	ONE	0.909	268.0	0.0	142.9										
ARRIVAL DATE = 2446066.0																			
45920.0	46066.0	0.368	265.4	-41.6	-9.03	0.767	73.1	0.484	0.722	160.0	379.1	0.373	1.071	11.11	1.970	96.2	207.6	47.9	0.509
		7.75	13.05	20.80	TWO	0.952	276.6	0.0	103.9										
45930.0	46066.0	0.358	269.3	-47.7	-11.54	0.756	76.5	0.472	0.712	163.9	373.6	0.376	1.048	14.14	1.965	94.3	218.8	53.8	0.593
		7.55	15.51	23.06	TWO	0.952	276.6	0.0	108.3										
45940.0	46066.0	0.379	270.1	-57.0	-16.56	0.747	80.3	0.462	0.703	168.3	368.7	0.378	1.028	19.66	1.961	92.8	231.7	62.6	0.742
		7.99	19.87	27.86	TWO	0.952	276.6	0.0	109.0										
45950.0	46066.0	0.519	264.0	-68.8	-30.08	0.740	84.7	0.455	0.696	173.6	365.0	0.379	1.013	33.67	1.957	91.6	271.6	75.4	1.121
		11.17	31.06	42.24	TWO	0.952	276.6	0.0	104.6										
45970.0	46066.0	0.527	266.8	22.7	30.86	0.743	95.0	0.453	0.693	186.1	354.9	0.379D	1.007A	-26.29	1.956	88.4	255.7	-64.3	0.961
		11.37	26.33	37.70	ONE	0.952	276.6	0.0	113.9										
45980.0	46066.0	0.384	259.3	10.8	16.67	0.761	101.8	0.461	0.703	194.5	354.3	0.379D	1.027A	-11.61	1.961	88.2	238.1	-37.9	0.643
		8.09	16.95	25.04	ONE	0.952	276.6	0.0	128.1										
45990.0	46066.0	0.395	251.4	0.1	11.50	0.798	109.5	0.480	0.730	204.6	354.7	0.379D	1.080A	-5.92	1.974	88.3	234.3	-20.9	0.571
		8.33	14.85	23.18	ONE	0.952	276.6	0.0	133.7										
46000.0	46066.0	0.481	246.1	-7.1	8.95	0.867	118.1	0.521	0.793	216.5	356.9	0.380D	1.206A	-2.82	2.002	88.9	229.9	-10.3	0.552
		10.27	14.31	24.58	ONE	0.952	276.6	0.0	132.5										
ARRIVAL DATE = 2446068.0																			
45920.0	46068.0	0.354	266.1	-37.9	-6.91	0.769	73.4	0.479	0.724	159.9	387.0	0.377	1.071	9.56	1.932	98.7	200.8	44.0	0.457
		7.46	11.54	19.00	TWO	0.994	284.7	0.0	94.4										
45930.0	46068.0	0.333	270.0	-42.2	-8.31	0.759	76.9	0.465	0.715	163.9	381.5	0.382	1.047	11.45	1.927	96.8	211.9	48.7	0.506
		7.03	12.96	19.99	TWO	0.994	284.7	0.0	101.3										
45940.0	46068.0	0.325	271.5	-48.8	-10.79	0.751	80.8	0.454	0.706	168.6	376.7	0.386	1.027	14.39	1.923	95.2	221.9	54.8	0.582
		6.87	15.19	22.06	TWO	0.994	284.7	0.0	105.2										
45950.0	46068.0	0.354	269.0	-58.8	-15.99	0.746	85.2	0.446	0.700	173.9	372.6	0.388	1.012	20.04	1.920	93.9	233.7	64.5	0.727
		7.45	19.42	26.87	TWO	0.994	284.7	0.0	105.7										
45960.0	46068.0	0.531	260.9	-70.6	-31.62	0.745	90.2	0.442	0.697	180.3	370.0	0.389	1.005A	36.10	1.918	93.0	287.0	78.7	1.151
		11.49	31.94	43.43	TWO	0.994	284.7	0.0	101.3										
45980.0	46068.0	0.464	260.8	18.7	24.23	0.770	102.1	0.450	0.711	195.7	363.3	0.391	1.030A	-18.88	1.925	91.0	242.5	-57.7	0.737
		9.87	19.72	29.59	ONE	0.994	284.7	0.0	113.3										
45990.0	46068.0	0.410	251.1	4.1	13.74	0.808	109.7	0.471	0.739	206.0	364.2	0.391	1.087A	-7.94	1.939	91.3	232.4	-30.2	0.532
		8.65	13.71	22.36	ONE	0.994	284.7	0.0	121.9										
46000.0	46068.0	0.483	245.4	-5.6	9.70	0.876	118.0	0.514	0.803	218.0	366.4	0.390	1.217A	-3.44	1.967	92.2	226.6	-13.9	0.492
		10.32	12.55	22.87	ONE	0.994	284.7	0.0	120.8										
ARRIVAL DATE = 2446070.0																			
45920.0	46070.0	0.347	266.6	-34.9	-5.36	0.770	73.4	0.477	0.725	159.8	394.5	0.379	1.071	8.58	1.896	101.0	193.9	40.1	0.431
		7.31	10.81	18.12	TWO	1.034	292.3	0.0	83.6										
45930.0	46070.0	0.319	270.5	-37.9	-6.18	0.761	77.1	0.461	0.716	163.9	389.0	0.386	1.046	9.85	1.891	99.0	205.0	44.4	0.457
		6.76	11.55	18.31	TWO	1.034	292.3	0.0	91.9										
45940.0	46070.0	0.299	271.9	-42.5	-7.54	0.754	81.1	0.448	0.709	168.6	384.2	0.391	1.026	11.62	1.887	97.4	214.4	49.1	0.499
		6.39	12.76	19.15	TWO	1.034	292.3	0.0	97.9										
45950.0	46070.0	0.296	269.8	-49.5	-10.03	0.750	85.5	0.439	0.703	174.2	380.1	0.395	1.012	14.51	1.885	96.1	222.8	55.7	0.568
		6.33	14.78	21.11	TWO	1.034	292.3	0.0	101.4										
45960.0	46070.0	0.339	262.8	-59.9	-15.60	0.750	90.5	0.434	0.701	180.6	377.1	0.397	1.005A	20.47	1.883	95.1	232.8	66.7	0.714
		7.15	19.05	26.20	TWO	1.034	292.3	0.0	101.6										
45970.0	46070.0	0.588	256.4	-71.5	-35.68	0.758	96.2	0.435	0.704	188.2	375.7	0.398	1.010A	40.92	1.885	94.8	323.6	81.6	1.244
		12.90	34.70	47.60	TWO	1.034	292.3	0.0	97.2										
45990.0	46070.0	0.445	252.6	9.9	18.00	0.815	109.7	0.464	0.745	207.0	372.7	0.399	1.090A	-12.00	1.905	94.0	229.8	-45.5	0.554
		9.44	14.38	23.82	ONE	1.034	292.3	0.0	108.9										
46000.0	46070.0	0.486	245.4	-3.7	10.83	0.881	117.9	0.509	0.809	218.8	374.9	0.398	1.221A	-4.44	1.933	95.0	221.8	-19.1	0.456
		10.40	11.52	21.92	ONE	1.034	292.3	0.0	108.4										
ARRIVAL DATE = 2446072.0																			
45920.0	46072.0	0.344	267.2	-32.3	-4.14	0.771	73.3	0.477	0.726	159.6	401.4	0.379	1.072	7.94	1.863	103.1	187.7	35.9	0.427
		7.27	10.69	17.95	TWO	1.072	299.5	0.0	72.5										
45930.0	46072.0	0.313	271.0	-34.5	-4.62	0.762	77.1	0.459	0.717	163.8	396.0	0.388	1.047	8.81	1.858	101.1	198.2	40.0	0.434
		6.64	10.90	17.53	TWO	1.072	299.5	0.0	81.4										
45940.0	46072.0	0.287	272.3	-37.6	-5.39	0.756	81.1	0.445	0.710	168.6	391.2	0.394	1.026	9.95	1.855	99.5	207.4	44.1	0.454
		6.16	11.47	17.63	TWO	1.072	299.5	0.0	88.5										
45950.0	46072.0	0.272	270.1	-42.3	-6.71	0.753	85.6	0.435	0.705	174.2	387.2	0.399	1.012	11.62	1.852	98.2	215.0	49.0	0.489
		5.89	12.49	18.37	TWO	1.072	299.5	0.0	93.6										
45960.0	46072.0	0.279	263.5	-49.1	-9.23	0.754	90.6	0.429	0.703	180.8	384.2	0.402	1.005A	14.47	1.851	97.2	221.1	56.1	0.553
		6.01	14.33	20.34	TWO	1.072	299.5	0.0	96.4										
45970.0	46072.0	0.342	253.0	-59.1	-15.47	0.762	96.3	0.429	0.707	188.4	382.3	0.403	1.011A	21.02	1.853	96.6	227.7	68.9	0.708
		7.21	18.86	26.07	TWO	1.072	299.5	0.0	96.5										
45990.0	46072.0	0.570	258.5	19.3	29.78	0.819	109.6	0.459	0.748	207.4	380.0	0.405	1.091A	-23.59	1.874	96.3	230.7	-71.6	0.786
		12.44	21.15	33.59	ONE	1.072	299.5	0.0	96.5										
46000.0	46072.0	0.494	246.3	-0.9	12.77	0.883	117.6	0.504	0.811	219.1	382.4	0.402	1.221A	-6.26	1.901	97.5	216.3	-27.2	0.451
		10.58	11.37	21.94	ONE	1.072	299.5	0.0	96.0										
ARRIVAL DATE = 2446074.0																			
45920.0	46074.0	0.346	267.8	-30.1	-3.12	0.771	72.9	0.480	0.726	159.4	408.0	0.377	1.074	7.51	1.832	105.1	183.0	31.7	0.440
		7.30	11.06	18.36	TWO	1.107	306.4	0.0	62.0										
45930.0	46074.0	0.311	271.6	-31.6	-3.39	0.763	76.8	0.460	0.717	163.5	402.6	0.387	1.048	8.12	1.828	103.1	192.5	35.6	0.432
		6.61	10.83	17.44	TWO	1.107	306.4	0.0	70.8										
45940.0	46074.0	0.281	272.8	-33.6	-3.83	0.757	81.0	0.444	0.711	168.4	397.8	0.395	1.027	8.87	1.825	101.4	201.1	39.3	0.436
		6.06	10.94	17.00	TWO	1.107	306.4	0.0	78.2										
45950.0	46074.0	0.260	270.7	-36.7	-4.55	0.754	85.5	0.433	0.706	174.1	393.9	0.401	1.012	9.87	1.822	100.1	208.3	43.1	0.450
		5.69	11.36	17.05	TWO	1.107	306.4	0.0	84.0										
45960.0	46074.0	0.255	264.3	-40.8	-5.81	0.756	90.6	0.426	0.705	180.7	390.8	0.404	1.005A	11.40	1.821	99.1	213.6	47.9	0.479
		5.60	12.20	17.80	TWO	1.107	306.4	0.0	88.1										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45970.0	46074.0	0.278	254.4	-46.3	-8.38	0.764	96.2	0.426	0.709	188.5	388.8	0.407	1.010A	14.23	1.823	98.5	216.8	55.4	0.539
		5.99	13.92	19.91	TWO	1.107	306.4	0.0	90.2										
45980.0	46074.0	0.370	244.2	-56.2	-15.79	0.784	102.5	0.435	0.721	197.4	388.1	0.407	1.035A	21.90	1.830	98.4	217.2	70.6	0.716
		7.79	19.10	26.89	TWO	1.107	306.4	0.0	90.3										
46000.0	46074.0	0.519	248.9	4.6	17.12	0.882	117.2	0.500	0.810	218.9	389.0	0.405	1.215A	-10.51	1.871	99.6	210.3	-41.9	0.503
		11.19	12.89	24.09	ONE	1.107	306.4	0.0	85.5										
								ARRIVAL DATE = 2446076.0											
45920.0	46076.0	0.352	268.5	-28.1	-2.23	0.770	72.3	0.486	0.725	159.0	414.2	0.373	1.078	7.24	1.805	107.1	179.7	27.8	0.466
		7.41	11.82	19.23	TWO	1.141	313.0	0.0	52.6										
45930.0	46076.0	0.313	272.3	-29.0	-2.37	0.763	76.4	0.464	0.717	163.2	408.7	0.385	1.050	7.65	1.801	104.9	188.2	31.3	0.446
		6.65	11.23	17.88	TWO	1.141	313.0	0.0	60.8										
45940.0	46076.0	0.281	273.6	-30.4	-2.61	0.757	80.7	0.446	0.711	168.0	404.0	0.394	1.028	8.12	1.798	103.2	196.0	34.5	0.437
		6.05	10.97	17.01	TWO	1.141	313.0	0.0	68.0										
45950.0	46076.0	0.256	271.6	-32.2	-2.99	0.754	85.3	0.433	0.706	173.8	400.1	0.401	1.012	8.73	1.795	101.8	202.6	37.6	0.437
		5.62	10.98	16.60	TWO	1.141	313.0	0.0	73.9										
45960.0	46076.0	0.245	265.4	-34.6	-3.63	0.756	90.3	0.425	0.705	180.5	397.0	0.405	1.005A	9.58	1.794	100.8	207.6	40.9	0.448
		5.43	11.28	16.72	TWO	1.141	313.0	0.0	78.4										
45970.0	46076.0	0.256	256.0	-37.3	-4.79	0.765	96.0	0.425	0.709	188.2	395.0	0.408	1.010A	10.94	1.796	100.2	210.4	45.3	0.472
		5.61	11.98	17.59	TWO	1.141	313.0	0.0	81.1										
45980.0	46076.0	0.300	246.3	-41.1	-7.39	0.784	102.2	0.433	0.721	197.1	394.1	0.409	1.033A	13.73	1.803	100.1	210.3	52.8	0.529
		6.40	13.64	20.04	TWO	1.141	313.0	0.0	82.4										
45990.0	46076.0	0.432	239.9	-53.2	-17.17	0.818	109.3	0.455	0.748	207.2	394.5	0.407	1.089A	23.71	1.817	100.6	201.5	71.5	0.757
		9.14	20.31	29.45	TWO	1.141	313.0	0.0	83.3										
								ARRIVAL DATE = 2446078.0											
45920.0	46078.0	0.360	269.3	-26.3	-1.43	0.769	71.6	0.494	0.724	158.6	420.1	0.366	1.082	7.07	1.781	109.0	177.9	24.3	0.503
		7.59	12.89	20.48	TWO	1.172	319.4	0.0	44.5										
45930.0	46078.0	0.319	273.2	-26.9	-1.49	0.762	75.8	0.469	0.717	162.7	414.5	0.380	1.053	7.32	1.777	106.7	185.4	27.3	0.472
		6.76	11.99	18.76	TWO	1.172	319.4	0.0	51.9										
45940.0	46078.0	0.284	274.7	-27.6	-1.60	0.756	80.2	0.450	0.710	167.5	409.8	0.391	1.030	7.60	1.773	104.9	192.3	30.1	0.453
		6.10	11.43	17.53	TWO	1.172	319.4	0.0	58.6										
45950.0	46078.0	0.256	272.8	-28.6	-1.78	0.754	84.9	0.435	0.706	173.3	405.8	0.399	1.013	7.94	1.771	103.5	198.3	32.5	0.443
		5.62	11.14	16.76	TWO	1.172	319.4	0.0	64.2										
45960.0	46078.0	0.242	267.0	-29.9	-2.08	0.756	90.0	0.426	0.705	180.0	402.8	0.404	1.005	8.39	1.770	102.4	202.9	34.8	0.441
		5.38	11.10	16.48	TWO	1.172	319.4	0.0	68.6										
45970.0	46078.0	0.247	258.0	-31.0	-2.59	0.764	95.6	0.425	0.708	187.7	400.7	0.408	1.009A	9.03	1.772	101.8	205.7	37.3	0.449
		5.47	11.32	16.80	TWO	1.172	319.4	0.0	71.4										
45980.0	46078.0	0.281	248.8	-31.9	-3.58	0.782	101.8	0.432	0.720	196.5	399.7	0.409	1.031A	10.15	1.779	101.7	206.1	40.7	0.471
		6.05	11.96	18.00	TWO	1.172	319.4	0.0	72.6										
45990.0	46078.0	0.350	242.2	-34.8	-6.12	0.815	108.8	0.453	0.745	206.4	399.8	0.408	1.083A	12.82	1.792	102.1	203.4	47.3	0.529
		7.38	13.62	21.01	TWO	1.172	319.4	0.0	72.7										
46000.0	46078.0	0.559	241.3	-54.5	-22.87	0.872	116.3	0.495	0.799	217.4	401.0	0.404	1.194A	29.69	1.817	103.3	176.4	74.2	0.910
		12.15	24.83	36.98	TWO	1.172	319.4	0.0	77.4										
								ARRIVAL DATE = 2446080.0											
45920.0	46080.0	0.372	270.1	-24.8	-0.68	0.768	70.6	0.505	0.723	158.2	425.7	0.358	1.088	7.00	1.760	110.8	177.2	21.4	0.549
		7.85	14.22	22.07	TWO	1.202	325.5	0.0	37.6										
45930.0	46080.0	0.328	274.2	-24.9	-0.69	0.760	75.0	0.477	0.716	162.1	420.1	0.374	1.057	7.12	1.756	108.5	183.8	23.9	0.509
		6.94	13.05	19.99	TWO	1.202	325.5	0.0	44.2										
45940.0	46080.0	0.290	275.9	-25.2	-0.73	0.755	79.5	0.455	0.709	166.9	415.2	0.386	1.032	7.24	1.752	106.5	190.0	26.2	0.480
		6.21	12.22	18.44	TWO	1.202	325.5	0.0	50.2										
45950.0	46080.0	0.260	274.4	-25.7	-0.79	0.752	84.3	0.439	0.705	172.6	411.2	0.395	1.014	7.38	1.750	105.0	195.4	28.1	0.462
		5.68	11.69	17.37	TWO	1.202	325.5	0.0	55.4										
45960.0	46080.0	0.242	268.9	-26.2	-0.90	0.754	89.4	0.429	0.704	179.2	408.1	0.402	1.005	7.56	1.749	103.9	199.7	29.6	0.452
		5.39	11.41	16.80	TWO	1.202	325.5	0.0	59.4										
45970.0	46080.0	0.245	260.3	-26.5	-1.07	0.762	95.0	0.426	0.707	186.9	406.0	0.406	1.008A	7.80	1.751	103.3	202.4	30.9	0.451
		5.42	11.37	16.80	TWO	1.202	325.5	0.0	62.0										
45980.0	46080.0	0.273	251.4	-26.2	-1.38	0.779	101.3	0.432	0.717	195.6	404.9	0.407	1.028A	8.18	1.757	103.1	203.2	32.0	0.459
		5.91	11.62	17.53	TWO	1.202	325.5	0.0	63.1										
45990.0	46080.0	0.333	245.0	-26.2	-2.04	0.811	108.1	0.452	0.741	205.4	404.8	0.406	1.076A	8.89	1.770	103.6	201.8	33.4	0.483
		7.04	12.30	19.33	TWO	1.202	325.5	0.0	62.4										
46000.0	46080.0	0.429	242.1	-28.6	-4.12	0.864	115.6	0.491	0.790	216.1	405.6	0.402	1.179A	11.03	1.793	104.6	197.8	37.8	0.542
		9.08	14.01	23.08	TWO	1.202	325.5	0.0	61.1										
								ARRIVAL DATE = 2446082.0											
45920.0	46082.0	0.388	271.0	-23.4	0.05	0.766	69.3	0.518	0.722	157.7	431.1	0.348	1.096	7.01	1.742	112.8	177.3	19.0	0.602
		8.18	15.78	23.95	TWO	1.229	331.4	0.0	31.7										
45930.0	46082.0	0.340	275.4	-23.2	0.05	0.759	73.9	0.487	0.714	161.5	425.3	0.366	1.062	7.00	1.738	110.2	183.3	21.0	0.553
		7.18	14.35	21.53	TWO	1.229	331.4	0.0	37.6										
45940.0	46082.0	0.299	277.4	-23.1	0.05	0.753	78.6	0.463	0.708	166.2	420.4	0.380	1.035	6.99	1.734	108.1	188.9	22.8	0.517
		6.38	13.29	19.67	TWO	1.229	331.4	0.0	43.0										
45950.0	46082.0	0.266	276.2	-23.2	0.05	0.750	83.5	0.445	0.703	171.7	416.3	0.390	1.016	6.98	1.732	106.5	193.8	24.2	0.491
		5.79	12.54	18.33	TWO	1.229	331.4	0.0	47.7										
45960.0	46082.0	0.246	271.3	-23.3	0.06	0.751	88.7	0.433	0.702	178.3	413.1	0.398	1.005	6.97	1.731	105.4	197.7	25.2	0.475
		5.44	12.07	17.52	TWO	1.229	331.4	0.0	51.3										
45970.0	46082.0	0.245	263.0	-23.1	0.07	0.759	94.4	0.429	0.704	185.8	410.8	0.402	1.006A	6.96	1.732	104.7	200.3	25.7	0.468
		5.42	11.86	17.29	TWO	1.229	331.4	0.0	53.7										
45980.0	46082.0	0.270	254.2	-22.4	0.08	0.775	100.6	0.434	0.714	194.4	409.6	0.404	1.024A	6.94	1.738	104.5	201.4	25.6	0.470
		5.85	11.93	17.78	TWO	1.229	331.4	0.0	54.6										
45990.0	46082.0	0.325	247.7	-21.6	0.11	0.805	107.4	0.452	0.736	204.1	409.3	0.403	1.068A	6.90	1.750	104.8	200.8	24.8	0.484
		6.88	12.34	19.22	TWO	1.229	331.4	0.0	53.7										
46000.0	46082.0	0.414	244.9	-21.1	0.18	0.855	114.9	0.488	0.781	214.6	409.9	0.400	1.162A	6.83	1.772	105.9	198.4	23.2	0.515
		8.74	13.23	21.97	TWO	1.229	331.4	0.0	51.2										
46010.0	46082.0	0.541	245.4	-20.8	0.52	0.937	122.8	0.553	0.877	225.8	411.1	0.392	1.362A	6.49	1.811	107.7	194.8	20.0	0.571
		11.71	14.85	26.56	TWO	1.229	331.4	0.0	46.9										
								ARRIVAL DATE = 2446084.0											
45920.0	46084.0	0.407	271.8	-22.1	0.76	0.764	67.8	0.534	0.720	157.2	436.4	0.336	1.105	7.09	1.727	114.7	178.1	17.0	0.663
		8.60	17.54	26.14	TWO	1.254	337.2	0.0	26.6										
45930.0	46084.0	0.356	276.5	-21.8	0.75	0.756	72.7	0.500	0.712	160.8	430.4	0.356	1.069	6.96	1.723	112.0	183.6	18.7	0.605
		7.50	15.86	23.35	TWO	1.254	337.2	0.0	31.9										
45940.0	46084.0	0.311	279.0	-21.4	0.77	0.751	77.5	0.473	0.706	165.3	425.3	0.372	1.040	6.83	1.719	109.7	188.7	20.1	0.561
		6.61	14.58	21.19	TWO	1.254	337.2	0.0	36.8										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45950.0	46084.0	0.275	276.3	-21.1	0.80	0.747	82.5	0.452	0.701	170.8	421.0	0.384	1.019	6.69	1.716	108.0	193.2	21.1	0.529
		5.95	13.64	19.59	TWO	1.254	337.2	0.0	41.0										
45960.0	46084.0	0.251	273.9	-20.8	0.87	0.748	87.8	0.439	0.699	177.2	417.7	0.392	1.006	6.54	1.715	106.7	196.9	21.6	0.507
		5.54	13.00	18.54	TWO	1.254	337.2	0.0	44.3										
45970.0	46084.0	0.247	266.1	-20.4	0.97	0.755	93.5	0.433	0.701	184.6	415.4	0.398	1.005A	6.35	1.716	105.9	199.4	21.6	0.495
		5.46	12.65	18.11	TWO	1.254	337.2	0.0	46.5										
45980.0	46084.0	0.268	257.3	-19.7	1.15	0.770	99.7	0.436	0.710	193.1	414.0	0.400	1.019A	6.09	1.721	105.7	200.7	20.9	0.493
		5.81	12.60	18.41	TWO	1.254	337.2	0.0	47.3										
45990.0	46084.0	0.319	250.6	-18.7	1.46	0.797	106.5	0.452	0.729	202.5	413.5	0.400	1.059A	5.71	1.732	106.0	200.5	19.2	0.504
		6.77	12.91	19.67	TWO	1.254	337.2	0.0	46.5										
46000.0	46084.0	0.404	247.5	-17.8	2.09	0.845	114.0	0.486	0.770	212.8	413.9	0.396	1.144A	5.01	1.753	107.0	198.9	16.0	0.531
		8.52	13.69	22.21	TWO	1.254	337.2	0.0	44.1										
46010.0	46084.0	0.527	248.0	-16.0	3.92	0.921	121.9	0.545	0.855	223.8	414.9	0.389	1.322A	3.12	1.790	108.8	196.3	9.2	0.580
		11.39	15.13	26.52	TWO	1.254	337.2	0.0	40.0										
ARRIVAL DATE = 2446086.0																			
45920.0	46086.0	0.431	272.7	-21.0	1.49	0.762	66.1	0.553	0.718	156.8	441.6	0.321	1.116	7.24	1.715	116.8	179.3	15.3	0.730
		9.11	19.51	28.63	TWO	1.277	342.9	0.0	22.3										
45930.0	46086.0	0.375	277.7	-20.5	1.44	0.754	71.2	0.515	0.710	160.1	435.3	0.344	1.077	6.99	1.711	113.8	184.5	16.7	0.664
		7.89	17.56	25.45	TWO	1.277	342.9	0.0	27.1										
45940.0	46086.0	0.326	280.6	-19.9	1.44	0.748	76.2	0.485	0.704	164.4	430.0	0.362	1.045	6.74	1.707	111.4	189.3	17.8	0.612
		6.91	16.06	22.97	TWO	1.277	342.9	0.0	31.5										
45950.0	46086.0	0.287	280.6	-19.3	1.48	0.744	81.3	0.462	0.699	169.7	425.6	0.376	1.022	6.49	1.704	109.5	193.5	18.5	0.574
		6.16	14.93	21.09	TWO	1.277	342.9	0.0	35.3										
45960.0	46086.0	0.260	276.5	-18.8	1.57	0.744	86.7	0.446	0.696	175.9	422.1	0.386	1.007	6.22	1.703	108.1	196.9	18.7	0.546
		5.67	14.14	19.81	TWO	1.277	342.9	0.0	38.3										
45970.0	46086.0	0.250	269.6	-18.3	1.73	0.750	92.5	0.438	0.698	183.2	419.6	0.392	1.004A	5.90	1.703	107.2	199.4	18.4	0.530
		5.52	13.66	19.18	TWO	1.277	342.9	0.0	40.3										
45980.0	46086.0	0.267	260.8	-17.6	1.98	0.763	98.7	0.440	0.705	191.5	418.0	0.395	1.015A	5.49	1.708	106.8	200.8	17.4	0.525
		5.80	13.51	19.31	TWO	1.277	342.9	0.0	41.1										
45990.0	46086.0	0.314	253.7	-16.7	2.41	0.789	105.5	0.453	0.723	200.7	417.4	0.395	1.050A	4.93	1.718	107.1	200.9	15.3	0.533
		6.66	13.74	20.40	TWO	1.277	342.9	0.0	40.6										
46000.0	46086.0	0.394	250.1	-15.9	3.19	0.833	113.0	0.484	0.758	210.8	417.6	0.392	1.125A	4.00	1.737	108.0	199.9	11.9	0.558
		8.31	14.48	22.79	TWO	1.277	342.9	0.0	38.6										
46010.0	46086.0	0.512	250.1	-14.5	4.99	0.904	120.9	0.539	0.834	221.6	418.3	0.385	1.282A	2.08	1.771	109.7	197.8	5.7	0.609
		11.02	15.95	26.98	TWO	1.277	342.9	0.0	35.3										
ARRIVAL DATE = 2446088.0																			
45920.0	46088.0	0.458	273.4	-20.1	2.24	0.760	64.0	0.575	0.717	156.4	446.8	0.304	1.129	7.46	1.707	119.1	180.9	13.9	0.804
		9.74	21.70	31.44	TWO	1.297	348.5	0.0	18.6										
45930.0	46088.0	0.397	278.9	-19.4	2.14	0.751	69.4	0.534	0.708	159.4	440.2	0.330	1.087	7.08	1.702	115.7	185.9	15.0	0.728
		8.37	19.47	27.84	TWO	1.297	348.5	0.0	22.8										
45940.0	46088.0	0.345	282.3	-18.6	2.10	0.744	74.7	0.500	0.701	163.4	434.6	0.351	1.052	6.73	1.698	113.0	190.4	15.9	0.669
		7.27	17.73	25.00	TWO	1.297	348.5	0.0	26.8										
45950.0	46088.0	0.301	282.9	-17.8	2.12	0.740	80.0	0.474	0.696	168.5	429.9	0.366	1.026	6.37	1.694	111.0	194.4	16.3	0.624
		6.43	16.40	22.83	TWO	1.297	348.5	0.0	30.3										
45960.0	46088.0	0.270	280.0	-17.1	2.21	0.740	85.4	0.456	0.693	174.5	426.3	0.377	1.009	5.99	1.693	109.4	197.7	16.4	0.591
		5.86	15.44	21.30	TWO	1.297	348.5	0.0	33.1										
45970.0	46088.0	0.256	273.4	-16.5	2.38	0.744	91.3	0.445	0.694	181.6	423.6	0.385	1.003A	5.57	1.693	108.4	200.1	15.9	0.570
		5.61	14.83	20.45	TWO	1.297	348.5	0.0	35.0										
45980.0	46088.0	0.267	264.7	-15.9	2.66	0.756	97.6	0.444	0.700	189.7	421.8	0.389	1.011A	5.05	1.697	107.9	201.6	14.7	0.562
		5.80	14.58	20.39	TWO	1.297	348.5	0.0	35.8										
45990.0	46088.0	0.309	257.1	-15.2	3.12	0.780	104.4	0.455	0.715	198.7	421.0	0.389	1.041A	4.37	1.706	108.1	202.0	12.6	0.567
		6.56	14.75	21.31	TWO	1.297	348.5	0.0	35.5										
46000.0	46088.0	0.384	252.9	-14.7	3.92	0.821	111.8	0.482	0.747	208.6	421.0	0.387	1.107A	3.37	1.723	108.9	201.3	9.3	0.591
		8.08	15.44	23.52	TWO	1.297	348.5	0.0	34.0										
46010.0	46088.0	0.496	252.3	-13.8	5.52	0.887	119.8	0.532	0.812	219.1	421.5	0.380	1.244A	1.58	1.754	110.5	199.8	4.1	0.640
		10.63	16.88	27.50	TWO	1.297	348.5	0.0	31.5										
ARRIVAL DATE = 2446090.0																			
45920.0	46090.0	0.491	274.1	-19.3	3.04	0.757	61.6	0.602	0.715	156.1	452.0	0.285	1.145	7.78	1.701	121.6	182.7	12.8	0.887
		10.50	24.13	34.63	TWO	1.316	354.0	0.0	15.4										
45930.0	46090.0	0.424	280.1	-18.5	2.85	0.748	67.3	0.555	0.706	158.7	445.0	0.314	1.098	7.25	1.696	117.8	187.5	13.7	0.800
		8.96	21.59	30.55	TWO	1.316	354.0	0.0	19.1										
45940.0	46090.0	0.367	284.0	-17.5	2.75	0.741	72.9	0.518	0.699	162.4	439.1	0.337	1.061	6.77	1.691	114.8	191.9	14.3	0.732
		7.73	19.59	27.31	TWO	1.316	354.0	0.0	22.7										
45950.0	46090.0	0.319	285.3	-16.5	2.74	0.736	78.3	0.488	0.693	167.2	434.2	0.355	1.032	6.31	1.688	112.5	195.7	14.6	0.680
		6.76	18.05	24.81	TWO	1.316	354.0	0.0	25.9										
45960.0	46090.0	0.283	283.2	-15.6	2.80	0.735	84.0	0.467	0.690	173.0	430.3	0.368	1.012	5.83	1.686	110.8	198.9	14.5	0.641
		6.09	16.91	23.00	TWO	1.316	354.0	0.0	28.6										
45970.0	46090.0	0.264	277.4	-15.0	2.96	0.738	89.9	0.454	0.689	179.8	427.4	0.377	1.002	5.32	1.686	109.6	201.4	13.8	0.616
		5.75	16.16	21.90	TWO	1.316	354.0	0.0	30.4										
45980.0	46090.0	0.268	269.0	-14.4	3.23	0.749	96.2	0.450	0.694	187.7	425.4	0.382	1.007A	4.72	1.688	109.0	202.9	12.6	0.603
		5.83	15.79	21.62	TWO	1.316	354.0	0.0	31.3										
45990.0	46090.0	0.304	261.0	-14.0	3.69	0.770	103.1	0.458	0.707	196.5	424.3	0.383	1.031A	3.97	1.696	109.0	203.6	10.6	0.605
		6.47	15.86	22.34	TWO	1.316	354.0	0.0	31.2										
46000.0	46090.0	0.373	256.0	-13.7	4.45	0.807	110.6	0.482	0.735	206.2	424.1	0.381	1.089A	2.93	1.712	109.7	203.2	7.6	0.627
		7.85	16.48	24.33	TWO	1.316	354.0	0.0	30.1										
46010.0	46090.0	0.478	254.7	-13.3	5.84	0.868	118.5	0.527	0.791	216.6	424.5	0.375	1.208A	1.28	1.740	111.2	202.1	3.1	0.673
		10.21	17.65	28.06	TWO	1.316	354.0	0.0	28.2										
ARRIVAL DATE = 2446092.0																			
45920.0	46092.0	0.528	274.6	-18.6	3.91	0.755	58.8	0.632	0.713	156.1	457.4	0.263	1.163	8.20	1.698	124.3	184.6	11.8	0.978
		11.41	26.84	38.24	TWO	1.333	359.6	0.0	12.8										
45930.0	46092.0	0.455	281.1	-17.7	3.60	0.745	64.9	0.580	0.704	158.2	449.9	0.296	1.113	7.49	1.693	120.1	189.4	12.5	0.880
		9.68	23.94	33.61	TWO	1.333	359.6	0.0	15.9										
45940.0	46092.0	0.393	285.6	-16.6	3.42	0.737	70.8	0.538	0.696	161.5	443.6	0.322	1.071	6.88	1.688	116.8	193.7	13.0	0.802
		8.28	21.65	29.92	TWO	1.333	359.6	0.0	19.1										
45950.0	46092.0	0.340	287.7	-15.4	3.34	0.732	76.5	0.505	0.690	165.9	438.4	0.342	1.039	6.30	1.684	114.2	197.5	13.1	0.742
		7.18	19.87	27.05	TWO	1.333	359.6	0.0	22.1										
45960.0	46092.0	0.299	286.5	-14.4	3.37	0.729	82.2	0.480	0.686	171.4	434.2	0.356	1.015	5.74	1.682	112.2	200.6	12.9	0.697
		6.38	18.53	24.92	TWO	1.333	359.6	0.0	24.6										
45970.0	46092.0	0.274	281.6	-13.6	3.49	0.732	88.3	0.464	0.685	178.0	431.0	0.367	1.003	5.14	1.681	110.9	203.1	12.2	0.665
		5.93	17.62	23.55	TWO	1.333	359.6	0.0	26.3										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
45980.0	46092.0	0.272	273.7	-13.2	3.74	0.740	94.7	0.458	0.688	185.6	428.8	0.373	1.004A	4.47	1.683	110.1	204.7	10.9	0.648
		5.89	17.12	23.01	TWO	1.333	359.6	0.0	27.3										
45990.0	46092.0	0.300	265.4	-13.0	4.17	0.759	101.6	0.463	0.699	194.2	427.5	0.376	1.023A	3.67	1.690	110.0	205.6	9.0	0.647
		6.40	17.08	23.48	TWO	1.333	359.6	0.0	27.4										
46000.0	46092.0	0.362	259.6	-13.0	4.86	0.793	109.1	0.483	0.723	203.7	427.0	0.374	1.072A	2.62	1.704	110.5	205.5	6.3	0.665
		7.63	17.60	25.23	TWO	1.333	359.6	0.0	26.7										
46010.0	46092.0	0.460	257.4	-12.9	6.07	0.849	117.2	0.522	0.771	213.8	427.2	0.369	1.174A	1.09	1.729	111.8	204.7	2.5	0.708
		9.79	18.86	28.65	TWO	1.333	359.6	0.0	25.2										
								ARRIVAL DATE = 2446094.0											
45920.0	46094.0	0.572	274.8	-18.1	4.89	0.753	55.5	0.666	0.711	156.3	463.0	0.238	1.185	8.75	1.698	127.3	186.6	11.0	1.080
		12.49	29.85	42.34	TWO	1.348	5.1	0.0	11.1										
45930.0	46094.0	0.492	281.9	-17.1	4.40	0.742	62.2	0.609	0.702	157.8	455.0	0.274	1.129	7.83	1.693	122.7	191.5	11.6	0.969
		10.53	26.55	37.08	TWO	1.348	5.1	0.0	13.2										
45940.0	46094.0	0.423	287.1	-15.8	4.11	0.734	68.3	0.562	0.694	160.6	448.2	0.304	1.084	7.06	1.688	118.9	195.8	11.9	0.880
		8.95	23.93	32.88	TWO	1.348	5.1	0.0	16.0										
45950.0	46094.0	0.365	290.0	-14.5	3.95	0.727	74.3	0.525	0.687	164.7	442.6	0.326	1.047	6.36	1.683	116.0	199.5	11.9	0.810
		7.69	21.88	29.57	TWO	1.348	5.1	0.0	18.7										
45960.0	46094.0	0.319	289.8	-13.3	3.92	0.724	80.3	0.496	0.682	169.8	438.1	0.344	1.021	5.69	1.680	113.8	202.7	11.6	0.758
		6.76	20.32	27.08	TWO	1.348	5.1	0.0	21.0										
45970.0	46094.0	0.287	285.9	-12.5	4.00	0.725	86.4	0.477	0.680	176.1	434.6	0.356	1.004	5.01	1.679	112.2	205.1	10.9	0.720
		6.17	19.23	25.39	TWO	1.348	5.1	0.0	22.7										
45980.0	46094.0	0.278	278.7	-12.1	4.20	0.732	93.0	0.467	0.682	183.4	432.1	0.363	1.001A	4.28	1.680	111.2	206.9	9.6	0.698
		5.99	18.57	24.57	TWO	1.348	5.1	0.0	23.8										
45990.0	46094.0	0.298	270.2	-12.1	4.58	0.748	100.0	0.469	0.691	191.7	430.5	0.367	1.015A	3.44	1.686	110.9	207.9	7.8	0.692
		6.35	18.40	24.76	TWO	1.348	5.1	0.0	24.1										
46000.0	46094.0	0.352	263.5	-12.3	5.20	0.778	107.5	0.485	0.711	200.9	429.8	0.367	1.055A	2.39	1.698	111.3	208.1	5.4	0.705
		7.41	18.80	26.21	TWO	1.348	5.1	0.0	23.6										
46010.0	46094.0	0.442	260.4	-12.5	6.24	0.830	115.6	0.519	0.752	210.9	429.8	0.362	1.143A	0.96	1.721	112.4	207.5	2.0	0.744
		9.38	19.92	29.30	TWO	1.348	5.1	0.0	22.6										
								ARRIVAL DATE = 2446096.0											
45930.0	46096.0	0.534	282.6	-16.6	5.30	0.739	58.9	0.642	0.700	157.6	460.3	0.250	1.149	8.28	1.696	125.5	193.6	10.7	1.068
		11.55	29.48	41.03	TWO	1.362	10.6	0.0	11.1										
45940.0	46096.0	0.458	288.5	-15.3	4.85	0.730	65.5	0.590	0.691	159.9	453.0	0.283	1.099	7.31	1.690	121.3	198.0	11.0	0.966
		9.75	26.48	36.23	TWO	1.362	10.6	0.0	13.2										
45950.0	46096.0	0.394	292.1	-13.8	4.58	0.722	71.8	0.548	0.684	163.5	446.9	0.309	1.058	6.48	1.686	118.0	201.8	10.9	0.886
		8.32	24.11	32.43	TWO	1.362	10.6	0.0	15.6										
45960.0	46096.0	0.342	292.9	-12.5	4.47	0.718	78.0	0.515	0.678	168.2	442.0	0.329	1.028	5.70	1.682	115.5	205.0	10.5	0.825
		7.22	22.30	29.52	TWO	1.362	10.6	0.0	17.7										
45970.0	46096.0	0.304	290.2	-11.5	4.48	0.717	84.4	0.492	0.675	174.1	438.1	0.343	1.007	4.94	1.680	113.6	207.5	9.8	0.780
		6.48	20.99	27.46	TWO	1.362	10.6	0.0	19.4										
45980.0	46096.0	0.287	283.9	-11.0	4.63	0.722	91.0	0.479	0.676	181.1	435.3	0.352	1.000A	4.15	1.681	112.4	209.4	8.6	0.752
		6.15	20.15	26.30	TWO	1.362	10.6	0.0	20.6										
45990.0	46096.0	0.297	275.4	-11.1	4.95	0.736	98.1	0.477	0.683	189.1	433.5	0.357	1.008A	3.26	1.685	111.9	210.5	6.9	0.740
		6.35	19.82	26.17	TWO	1.362	10.6	0.0	21.0										
46000.0	46096.0	0.342	268.1	-11.6	5.48	0.763	105.8	0.488	0.699	198.1	432.5	0.358	1.041A	2.21	1.695	112.1	210.9	4.6	0.749
		7.23	20.07	27.29	TWO	1.362	10.6	0.0	20.8										
46010.0	46096.0	0.425	263.9	-12.2	6.37	0.810	114.0	0.517	0.734	207.8	432.3	0.354	1.114A	0.86	1.715	113.1	210.7	1.7	0.782
		8.98	21.03	30.01	TWO	1.362	10.6	0.0	20.1										
								ARRIVAL DATE = 2446098.0											
45930.0	46098.0	0.583	283.0	-16.3	6.32	0.737	55.2	0.680	0.698	157.8	466.0	0.224	1.172	8.87	1.702	128.8	195.8	10.0	1.178
		12.75	32.76	45.52	TWO	1.373	16.2	0.0	10.0										
45940.0	46098.0	0.499	285.6	-14.9	5.66	0.726	62.3	0.622	0.688	159.4	458.0	0.260	1.117	7.67	1.696	124.0	200.3	10.2	1.062
		10.71	29.33	40.04	TWO	1.373	16.2	0.0	11.0										
45950.0	46098.0	0.429	294.1	-13.3	5.25	0.717	69.0	0.575	0.680	162.4	451.4	0.289	1.072	6.66	1.691	120.2	204.2	10.1	0.970
		9.07	26.60	35.67	TWO	1.373	16.2	0.0	12.8										
45960.0	46098.0	0.370	295.9	-11.8	5.03	0.712	75.4	0.538	0.674	166.7	446.0	0.312	1.037	5.77	1.687	117.3	207.5	9.6	0.899
		7.79	24.49	32.28	TWO	1.373	16.2	0.0	14.8										
45970.0	46098.0	0.325	294.4	-10.6	4.96	0.709	82.0	0.510	0.670	172.2	441.7	0.328	1.012	4.91	1.684	115.2	210.1	8.9	0.846
		6.88	22.92	29.80	TWO	1.373	16.2	0.0	16.4										
45980.0	46098.0	0.299	289.2	-10.1	5.04	0.713	88.8	0.493	0.670	178.8	438.5	0.340	1.000	4.05	1.684	113.7	212.1	7.7	0.810
		6.38	21.88	28.26	TWO	1.373	16.2	0.0	17.6										
45990.0	46098.0	0.300	281.1	-10.2	5.28	0.724	96.0	0.486	0.674	186.4	436.4	0.346	1.003A	3.13	1.687	113.0	213.4	6.1	0.793
		6.40	21.36	27.76	TWO	1.373	16.2	0.0	18.2										
46000.0	46098.0	0.335	273.1	-10.9	5.73	0.747	103.8	0.493	0.688	195.1	435.1	0.349	1.027A	2.08	1.696	112.9	214.0	4.1	0.795
		7.07	21.43	28.51	TWO	1.373	16.2	0.0	18.3										
46010.0	46098.0	0.408	267.9	-11.8	6.48	0.789	112.1	0.517	0.717	204.6	434.7	0.346	1.087A	0.78	1.713	113.7	214.0	1.5	0.822
		8.60	22.21	30.82	TWO	1.373	16.2	0.0	17.8										
								ARRIVAL DATE = 2446100.0											
45940.0	46100.0	0.547	290.5	-14.6	6.57	0.722	58.6	0.659	0.686	159.2	463.4	0.234	1.138	8.15	1.705	127.1	202.7	9.5	1.171
		11.86	32.53	44.40	TWO	1.382	21.9	0.0	9.5										
45950.0	46100.0	0.468	295.8	-12.9	5.97	0.713	65.7	0.606	0.677	161.5	456.2	0.267	1.088	6.93	1.700	122.8	206.7	9.3	1.065
		9.98	29.39	39.37	TWO	1.382	21.9	0.0	10.5										
45960.0	46100.0	0.403	298.7	-11.2	5.62	0.705	72.5	0.564	0.670	165.3	450.2	0.292	1.048	5.89	1.695	119.5	210.1	8.9	0.981
		8.49	26.93	35.42	TWO	1.382	21.9	0.0	12.1										
45970.0	46100.0	0.350	298.4	-9.9	5.45	0.701	79.3	0.531	0.665	170.3	445.5	0.312	1.019	4.93	1.692	117.0	212.9	8.1	0.919
		7.39	25.07	32.46	TWO	1.382	21.9	0.0	13.6										
45980.0	46100.0	0.316	294.4	-9.2	5.44	0.703	86.3	0.510	0.663	176.4	441.9	0.325	1.001	4.00	1.691	115.2	215.0	7.0	0.875
		6.70	23.78	30.47	TWO	1.382	21.9	0.0	14.8										
45990.0	46100.0	0.306	287.1	-9.3	5.60	0.711	93.7	0.499	0.666	183.7	439.3	0.334	0.999A	3.04	1.692	114.2	216.5	5.5	0.850
		6.51	23.04	29.56	TWO	1.382	21.9	0.0	15.6										
46000.0	46100.0	0.330	278.8	-10.2	5.96	0.731	101.6	0.501	0.677	192.0	437.7	0.338	1.016A	1.98	1.699	113.9	217.3	3.6	0.845
		6.98	22.91	29.89	TWO	1.382	21.9	0.0	15.8										
46010.0	46100.0	0.392	272.5	-11.3	6.57	0.768	110.0	0.519	0.700	201.2	437.0	0.337	1.064A	0.73	1.714	114.4	217.5	1.3	0.865
		8.26	23.49	31.75	TWO	1.382	21.9	0.0	15.6										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2446508.0											
46360.0	46508.C	0.482	341.8	11.3	11.57	0.798	65.1	0.536	0.729	153.1	307.3	0.338D	1.119	-5.54	1.931	72.2	268.5	-10.5	0.974
		10.30	26.72	37.01	ONE	0.608	285.3	0.0	160.3										
46370.0	46508.C	0.461	350.2	10.3	8.62	0.779	66.1	0.545	0.710	155.8	300.2	0.323D	1.097	-2.12	1.922	69.7	271.2	-3.7	1.025
		9.81	28.21	38.02	ONE	0.608	285.3	0.0	165.5										
46380.0	46508.C	0.446	357.1	10.7	7.02	0.756	67.3	0.556	0.691	158.7	293.1	0.307D	1.074	-0.02	1.912	67.3	274.1	-0.0	1.085
		9.52	30.01	39.53	ONE	0.608	285.3	0.0	168.9										
46390.0	46508.C	0.439	2.9	11.6	6.08	0.731	68.9	0.569	0.671	161.8	286.2	0.290D	1.053	1.46	1.901	64.8	277.0	2.2	1.149
		9.30	31.89	41.18	ONE	0.608	285.3	0.0	171.4										
46400.0	46508.C	0.430	7.7	12.6	5.50	0.703	71.0	0.584	0.652	165.1	279.4	0.271D	1.033	2.63	1.889	62.3	279.7	3.6	1.213
		9.11	33.79	42.90	ONE	0.608	285.3	0.0	173.4										
46410.0	46508.C	0.424	11.2	13.4	5.17	0.672	73.9	0.602	0.633	168.6	272.9	0.252D	1.014	3.62	1.877	59.7	282.4	4.6	1.277
		8.97	35.69	44.66	ONE	0.608	285.3	0.0	174.6										
46420.0	46508.C	0.421	13.1	13.7	5.02	0.638	78.0	0.622	0.615	172.5	266.6	0.233D	0.998	4.54	1.865	57.2	284.9	5.3	1.342
		8.90	37.61	46.51	ONE	0.608	285.3	0.0	174.7										
46430.0	46508.C	0.425	12.1	13.4	5.04	0.606	84.0	0.644	0.600	176.6	260.6	0.213D	0.986	5.43	1.853	54.6	287.3	5.8	1.407
		8.99	39.55	48.54	ONE	0.608	285.3	0.0	173.8										
46440.0	46508.C	0.444	10.9	12.1	5.22	0.580	92.7	0.670	0.589	181.3	255.1	0.194D	0.984A	6.36	1.845	52.0	289.5	6.3	1.475
		9.41	41.57	50.98	ONE	0.608	285.3	0.0	172.4										
46450.0	46508.C	0.490	6.9	9.9	5.59	0.576	105.1	0.700	0.588	186.7	250.4	0.176D	1.000A	7.39	1.844	49.2	291.5	6.7	1.549
		10.50	43.77	54.27	ONE	0.608	285.3	0.0	170.9										
46460.0	46508.C	0.587	2.1	7.1	6.23	0.624	120.9	0.737	0.609	193.3	246.8	0.160D	1.059A	8.61	1.861	46.3	293.2	7.1	1.638
		12.86	46.41	59.26	ONE	0.608	285.3	0.0	169.4										
								ARRIVAL DATE = 2446510.0											
46360.0	46510.C	0.473	339.6	15.4	13.91	0.808	66.8	0.509	0.737	152.5	314.2	0.362D	1.112	-7.71	1.899	74.9	272.0	-16.0	0.895
		10.10	24.39	34.48	ONE	0.607	292.9	0.0	154.0										
46370.0	46510.C	0.438	345.4	12.4	9.22	0.790	67.9	0.515	0.719	155.2	307.2	0.349D	1.089	-2.63	1.890	72.6	274.5	-5.1	0.926
		9.28	25.30	34.58	ONE	0.607	292.9	0.0	160.9										
46380.0	46510.C	0.420	356.8	11.8	7.03	0.770	69.3	0.523	0.701	158.2	300.2	0.334D	1.068	-0.03	1.881	70.3	277.5	-0.1	0.980
		8.88	26.89	35.76	ONE	0.607	292.9	0.0	164.6										
46390.0	46510.C	0.407	2.8	12.3	5.82	0.748	71.0	0.534	0.683	161.4	293.4	0.318D	1.047	1.62	1.871	68.0	280.5	2.7	1.038
		8.59	28.59	37.18	ONE	0.607	292.9	0.0	167.3										
46400.0	46510.C	0.396	7.5	12.9	5.09	0.724	73.1	0.546	0.665	164.8	286.7	0.302D	1.028	2.82	1.860	65.7	283.3	4.4	1.096
		8.35	30.31	38.67	ONE	0.607	292.9	0.0	169.5										
46410.0	46510.C	0.388	10.8	13.5	4.65	0.697	76.0	0.561	0.647	168.5	280.3	0.284D	1.010	3.79	1.849	63.4	286.0	5.4	1.153
		8.17	32.02	40.19	ONE	0.607	292.9	0.0	171.2										
46420.0	46510.C	0.382	12.3	13.6	4.41	0.669	80.0	0.578	0.631	172.5	274.2	0.266D	0.995	4.62	1.838	61.1	288.5	6.1	1.211
		8.05	33.72	41.77	ONE	0.607	292.9	0.0	172.4										
46430.0	46510.C	0.384	11.8	12.9	4.32	0.643	85.6	0.597	0.617	177.0	268.6	0.249D	0.985	5.40	1.828	58.8	290.8	6.7	1.268
		8.09	35.42	43.51	ONE	0.607	292.9	0.0	173.0										
46440.0	46510.C	0.401	9.1	11.3	4.37	0.624	93.5	0.619	0.608	182.2	263.5	0.231D	0.985A	6.18	1.822	56.5	292.9	7.1	1.326
		8.45	37.15	45.60	ONE	0.607	292.9	0.0	172.9										
46450.0	46510.C	0.445	4.6	8.8	4.56	0.625	104.3	0.646	0.609	188.2	259.4	0.216D	1.002A	6.99	1.822	54.2	294.7	7.4	1.389
		9.43	39.00	48.43	ONE	0.607	292.9	0.0	172.3										
46460.0	46510.C	0.536	359.5	5.7	4.94	0.670	117.9	0.680	0.632	195.6	256.7	0.202D	1.062A	7.91	1.839	51.9	296.0	7.8	1.462
		11.59	41.18	52.77	ONE	0.607	292.9	0.0	171.6										
								ARRIVAL DATE = 2446512.0											
46360.0	46512.C	0.494	334.8	21.7	18.89	0.816	68.3	0.485	0.744	152.0	320.8	0.383D	1.105	-12.54	1.869	77.4	276.3	-27.4	0.860
		10.59	23.35	33.94	ONE	0.611	300.1	0.0	144.3										
46370.0	46512.C	0.421	348.2	14.9	10.14	0.800	69.5	0.489	0.727	154.8	313.9	0.372D	1.083	-3.48	1.861	75.3	277.2	-7.5	0.838
		8.89	22.70	31.59	ONE	0.611	300.1	0.0	155.9										
46380.0	46512.C	0.395	356.4	12.9	7.04	0.783	71.0	0.495	0.710	157.8	307.0	0.359D	1.062	-0.04	1.852	73.1	280.3	-0.1	0.883
		8.34	24.04	32.37	ONE	0.611	300.1	0.0	160.2										
46390.0	46512.C	0.379	2.6	12.7	5.51	0.763	72.7	0.503	0.693	161.1	300.3	0.345D	1.042	1.84	1.843	70.9	283.4	3.4	0.936
		7.99	25.58	33.57	ONE	0.611	300.1	0.0	163.0										
46400.0	46512.C	0.366	7.2	13.0	4.64	0.742	75.0	0.513	0.676	164.6	293.8	0.330D	1.023	3.09	1.833	68.8	286.4	5.3	0.989
		7.71	27.14	34.86	ONE	0.611	300.1	0.0	165.3										
46410.0	46512.C	0.355	10.3	13.3	4.11	0.719	77.9	0.524	0.660	168.5	287.5	0.314D	1.006	4.02	1.823	66.6	289.1	6.5	1.040
		7.49	28.67	36.17	ONE	0.611	300.1	0.0	167.3										
46420.0	46512.C	0.348	11.4	13.1	3.80	0.695	81.8	0.538	0.645	172.8	281.7	0.298D	0.993	4.79	1.814	64.6	291.6	7.2	1.091
		7.35	30.17	37.52	ONE	0.611	300.1	0.0	168.9										
46430.0	46512.C	0.349	10.4	12.1	3.64	0.674	87.1	0.554	0.633	177.6	276.3	0.282D	0.984	5.46	1.805	62.6	293.9	7.7	1.141
		7.36	31.65	39.01	ONE	0.611	300.1	0.0	170.1										
46440.0	46512.C	0.365	7.0	10.1	3.60	0.661	94.3	0.573	0.626	183.2	271.7	0.267D	0.985A	6.11	1.801	60.6	295.9	8.1	1.191
		7.68	33.13	40.81	ONE	0.611	300.1	0.0	170.9										
46450.0	46512.C	0.407	2.1	7.3	3.67	0.667	103.9	0.597	0.630	189.8	268.2	0.254D	1.005A	6.76	1.803	58.7	297.4	8.4	1.243
		8.60	34.68	43.27	ONE	0.611	300.1	0.0	171.2										
46460.0	46512.C	0.495	356.9	4.1	3.87	0.711	115.9	0.628	0.656	198.2	266.4	0.244D	1.068A	7.45	1.820	56.9	298.4	8.7	1.303
		10.62	36.46	47.08	ONE	0.611	300.1	0.0	171.1										
								ARRIVAL DATE = 2446514.0											
46370.0	46514.C	0.413	346.1	18.4	11.86	0.809	70.9	0.466	0.735	154.5	320.5	0.392D	1.077	-5.12	1.835	77.7	279.3	-12.1	0.763
		8.72	20.50	29.22	ONE	0.621	306.9	0.0	150.0										
46380.0	46514.C	0.374	356.0	13.9	7.05	0.793	72.4	0.470	0.719	157.6	313.7	0.381D	1.056	-0.05	1.827	75.6	282.4	-0.1	0.796
		7.88	21.45	29.33	ONE	0.621	306.9	0.0	155.5										
46390.0	46514.C	0.355	2.4	12.8	5.11	0.776	74.3	0.475	0.703	160.9	307.0	0.369D	1.037	2.15	1.818	73.6	285.8	4.5	0.843
		7.47	22.86	30.33	ONE	0.621	306.9	0.0	158.4										
46400.0	46514.C	0.340	7.0	12.7	4.11	0.757	76.5	0.483	0.687	164.6	300.6	0.355D	1.019	3.44	1.809	71.6	288.9	6.6	0.891
		7.17	24.27	31.44	ONE	0.621	306.9	0.0	160.8										
46410.0	46514.C	0.327	9.7	12.7	3.52	0.737	79.5	0.492	0.672	168.7	294.6	0.342D	1.003	4.34	1.800	69.6	291.8	7.8	0.938
		6.93	25.64	32.57	ONE	0.621	306.9	0.0	163.0										
46420.0	46514.C	0.319	10.4	12.2	3.17	0.718	83.3	0.503	0.659	173.3	289.0	0.327D	0.991	5.03	1.792	67.8	294.3	8.5	0.983
		6.77	26.96	33.73	ONE	0.621	306.9	0.0	164.8										
46430.0	46514.C	0.319	8.8	10.9	2.96	0.702	88.3	0.516	0.649	178.4	283.9	0.314D	0.984	5.61	1.785	66.0	296.5	8.9	1.026
		6.76	28.24	35.01	ONE	0.621	306.9	0.0	166.3										
46440.0	46514.C	0.335	4.8	8.5	2.86	0.693	95.0	0.533	0.644	184.4	279.8	0.301D	0.987A	6.13	1.782	64.3	298.4	9.2	1.068
		7.07	29.50	36.57	ONE	0.621	306.9	0.0	167.4										
46450.0	46514.C	0.378	359.4	5.4	2.86	0.703	103.7	0.553	0.650	191.7	276.9	0.290D	1.009A	6.64	1.786	62.7	299.7	9.5	1.112
		7.95	30.78	38.73	ONE	0.621	306.9	0.0	168.1										
46460.0	46514.C	0.464	354.2	2.2	2.95	0.747	114.5	0.583	0.679	200.9	275.9	0.283D	1.075A	7.16	1.804	61.3	300.4	9.8	1.161
		9.88	32.23	42.11	ONE	0.621	306.9	0.0	168.2										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
									ARRIVAL DATE = 2446516.0										
46370.0	46516.C	0.434	341.1	24.9	16.35	0.816	72.0	0.447	0.741	154.2	326.7	0.410D	1.072	-9.54	1.812	79.9	281.7	-24.0	0.725
		9.19	19.38	28.57	ONE	0.635	313.5	0.0	140.9										
46380.0	46516.C	0.356	355.5	14.9	7.07	0.802	73.6	0.448	0.726	157.4	320.1	0.401D	1.052	-0.07	1.804	77.9	283.9	-0.2	0.716
		7.51	19.11	26.62	ONE	0.635	313.5	0.0	150.4										
46390.0	46516.C	0.333	2.4	12.5	4.58	0.787	75.6	0.452	0.711	160.9	313.5	0.390D	1.033	2.61	1.796	76.0	287.6	6.0	0.760
		7.04	20.41	27.44	ONE	0.635	313.5	0.0	153.4										
46400.0	46516.C	0.316	6.8	11.9	3.46	0.770	77.9	0.457	0.697	164.8	307.3	0.379D	1.015	3.94	1.788	74.1	290.9	8.4	0.804
		6.71	21.69	28.41	ONE	0.635	313.5	0.0	156.0										
46410.0	46516.C	0.303	9.3	11.6	2.85	0.753	80.8	0.464	0.683	169.0	301.4	0.366D	1.000	4.76	1.780	72.3	293.9	9.6	0.846
		6.46	22.92	29.38	ONE	0.635	313.5	0.0	158.2										
46420.0	46516.C	0.294	9.5	10.8	2.49	0.737	84.5	0.473	0.672	173.8	296.1	0.354D	0.989	5.36	1.773	70.6	296.5	10.2	0.885
		6.29	24.08	30.37	ONE	0.635	313.5	0.0	160.2										
46430.0	46516.C	0.294	7.2	9.2	2.27	0.725	89.4	0.483	0.663	179.3	291.4	0.342D	0.983	5.83	1.767	69.1	298.7	10.5	0.922
		6.29	25.17	31.46	ONE	0.635	313.5	0.0	161.9										
46440.0	46516.C	0.310	2.6	6.5	2.15	0.720	95.7	0.497	0.660	185.8	287.7	0.332D	0.988A	6.24	1.765	67.6	300.4	10.7	0.958
		6.59	26.23	32.82	ONE	0.635	313.5	0.0	163.2										
46450.0	46516.C	0.354	356.9	3.3	2.10	0.733	103.7	0.516	0.669	193.6	285.3	0.324D	1.014A	6.62	1.771	66.4	301.6	10.8	0.994
		7.46	27.29	34.75	ONE	0.635	313.5	0.0	163.9										
46460.0	46516.0	0.440	351.7	0.2	2.13	0.778	113.6	0.545	0.702	203.6	285.2	0.319D	1.084A	7.00	1.790	65.3	301.9	11.1	1.033
		9.32	28.47	37.79	ONE	0.635	313.5	0.0	164.0										
46470.0	46516.C	0.588	348.4	-2.0	2.22	0.882	124.6	0.600	0.801	216.8	288.2	0.320D	1.281A	7.39	1.839	64.4	300.8	11.3	1.088
		12.88	30.08	42.96	ONE	0.635	313.5	0.0	163.1										
									ARRIVAL DATE = 2446518.0										
46360.0	46518.C	0.378	357.7	-20.8	-8.55	0.834	71.4	0.432	0.761	151.1	340.3	0.432D	1.089	15.31	1.798	84.1	279.6	41.8	0.708
		7.96	18.88	26.83	TWO	0.653	319.8	0.0	124.7										
46380.0	46518.C	0.342	354.9	15.8	7.11	0.809	74.6	0.430	0.733	157.3	326.3	0.418D	1.048	-0.11	1.784	80.0	284.5	-0.3	0.645
		7.21	17.02	24.23	ONE	0.653	319.8	0.0	144.7										
46390.0	46518.C	0.314	2.7	11.4	3.78	0.796	76.6	0.431	0.719	161.0	319.9	0.409D	1.029	3.35	1.776	78.2	288.7	8.5	0.687
		6.66	18.25	24.91	ONE	0.653	319.8	0.0	147.8										
46400.0	46518.C	0.296	7.0	10.4	2.62	0.781	79.0	0.435	0.705	164.9	313.8	0.399D	1.012	4.63	1.769	76.4	292.3	11.0	0.727
		6.33	19.42	25.75	ONE	0.653	319.8	0.0	150.5										
46410.0	46518.C	0.282	9.0	9.9	2.06	0.767	81.9	0.440	0.693	169.4	308.1	0.388D	0.998	5.33	1.762	74.8	295.4	11.9	0.764
		6.08	20.50	26.58	ONE	0.653	319.8	0.0	153.0										
46420.0	46518.C	0.273	8.6	8.9	1.73	0.754	85.6	0.446	0.683	174.5	303.0	0.378D	0.987	5.79	1.756	73.2	298.1	12.3	0.798
		5.91	21.51	27.42	ONE	0.653	319.8	0.0	155.2										
46430.0	46518.C	0.273	5.7	7.0	1.54	0.744	90.2	0.455	0.676	180.3	298.6	0.368D	0.983A	6.14	1.751	71.8	300.3	12.4	0.829
		5.92	22.44	28.36	ONE	0.653	319.8	0.0	157.0										
46440.0	46518.0	0.291	0.5	4.2	1.43	0.743	96.2	0.467	0.675	187.2	295.4	0.360D	0.990A	6.43	1.751	70.6	302.0	12.4	0.859
		6.23	23.32	29.55	ONE	0.653	319.8	0.0	158.4										
46450.0	46518.C	0.336	354.5	0.9	1.37	0.758	103.7	0.484	0.686	195.6	293.6	0.354D	1.018A	6.68	1.758	69.6	302.9	12.5	0.888
		7.09	24.18	31.28	ONE	0.653	319.8	0.0	159.1										
46460.0	46518.C	0.422	349.5	-1.9	1.36	0.804	112.8	0.513	0.722	206.3	294.1	0.352D	1.093A	6.92	1.778	68.8	302.9	12.5	0.921
		8.91	25.13	34.05	ONE	0.653	319.8	0.0	159.0										
46470.0	46518.C	0.565	346.5	-3.7	1.39	0.903	123.1	0.570	0.825	220.2	297.9	0.355D	1.296A	7.17	1.826	68.3	301.3	12.7	0.965
		12.32	26.45	38.77	ONE	0.653	319.8	0.0	157.7										
									ARRIVAL DATE = 2446520.0										
46360.0	46520.C	0.346	353.4	-8.8	-2.37	0.838	72.1	0.421	0.765	150.9	346.1	0.443D	1.086	9.27	1.780	85.9	275.1	29.7	0.578
		7.29	15.06	22.35	TWO	0.674	325.9	0.0	123.3										
46370.0	46520.C	0.344	3.0	-16.2	-6.88	0.827	73.7	0.417	0.751	154.0	339.1	0.438D	1.065	13.83	1.773	83.9	283.1	39.3	0.665
		7.25	17.61	24.86	TWO	0.674	325.9	0.0	124.6										
46380.0	46520.C	0.330	354.3	16.7	7.25	0.816	75.5	0.415	0.738	157.3	332.4	0.432D	1.044	-0.24	1.767	82.0	284.3	-0.7	0.582
		6.98	15.19	22.17	ONE	0.674	325.9	0.0	138.4										
46390.0	46520.C	0.296	3.8	8.6	2.40	0.803	77.5	0.415	0.725	161.0	326.1	0.425D	1.026	4.66	1.760	80.2	289.1	13.0	0.626
		6.33	16.46	22.79	ONE	0.674	325.9	0.0	141.2										
46400.0	46520.C	0.279	7.6	7.7	1.46	0.791	79.9	0.416	0.713	165.2	320.1	0.416D	1.010	5.65	1.753	78.6	293.0	14.8	0.661
		6.02	17.50	23.52	ONE	0.674	325.9	0.0	144.3										
46410.0	46520.C	0.265	9.1	7.3	1.07	0.778	82.8	0.419	0.702	169.8	314.6	0.408D	0.996	6.10	1.747	77.0	296.4	15.1	0.693
		5.77	18.42	24.19	ONE	0.674	325.9	0.0	147.1										
46420.0	46520.C	0.256	8.1	6.3	0.87	0.768	86.4	0.424	0.693	175.1	309.7	0.399D	0.986	6.37	1.741	75.6	299.2	15.0	0.721
		5.61	19.26	24.87	ONE	0.674	325.9	0.0	149.6										
46430.0	46520.C	0.257	4.4	4.3	0.75	0.761	91.0	0.431	0.687	181.3	305.7	0.391D	0.983A	6.55	1.738	74.4	301.4	14.8	0.748
		5.63	20.03	25.66	ONE	0.674	325.9	0.0	151.6										
46440.0	46520.C	0.276	358.7	1.5	0.68	0.762	96.7	0.442	0.688	188.6	302.8	0.384D	0.992A	6.70	1.739	73.3	303.0	14.6	0.772
		5.95	20.75	26.71	ONE	0.674	325.9	0.0	153.0										
46450.0	46520.C	0.322	352.5	-1.6	0.64	0.779	103.8	0.458	0.701	197.6	301.6	0.380D	1.023A	6.82	1.746	72.5	303.7	14.4	0.796
		6.82	21.45	28.27	ONE	0.674	325.9	0.0	153.7										
46460.0	46520.C	0.408	347.7	-4.0	0.62	0.825	112.3	0.487	0.740	208.9	302.7	0.380D	1.101A	6.93	1.768	72.0	303.3	14.3	0.822
		8.61	22.21	30.82	ONE	0.674	325.9	0.0	153.4										
46470.0	46520.C	0.548	345.1	-5.4	0.62	0.920	121.9	0.547	0.847	223.3	307.0	0.384D	1.310A	7.04	1.815	71.8	301.1	14.3	0.859
		11.90	23.31	35.21	ONE	0.674	325.9	0.0	151.6										
									ARRIVAL DATE = 2446522.0										
46360.0	46522.0	0.336	351.2	-3.1	0.29	0.841	72.6	0.412	0.768	150.8	351.8	0.451D	1.084	6.74	1.765	87.6	271.7	23.8	0.512
		7.10	13.15	20.25	TWO	0.698	331.9	0.0	117.1										
46370.0	46522.0	0.318	356.7	0.0	0.53	0.831	74.2	0.406	0.755	153.8	344.9	0.448D	1.062	6.48	1.759	85.6	278.2	21.8	0.532
		6.74	13.72	20.46	TWO	0.698	331.9	0.0	123.4										
46380.0	46522.C	0.313	355.6	14.4	5.82	0.821	76.1	0.403	0.743	157.3	338.3	0.444D	1.042	1.19	1.752	83.8	283.1	3.9	0.529
		6.65	13.64	20.30	TWO	0.698	331.9	0.0	131.1										
46390.0	46522.C	0.282	6.9	1.0	-0.65	0.810	78.2	0.401	0.731	161.1	332.0	0.438D	1.024	7.64	1.746	82.1	289.1	22.9	0.591
		6.08	15.43	21.51	ONE	0.698	331.9	0.0	132.5										
46400.0	46522.C	0.266	9.2	2.9	-0.31	0.799	80.6	0.401	0.719	165.4	326.2	0.431D	1.007	7.30	1.740	80.5	293.2	20.9	0.612
		5.78	16.05	21.83	ONE	0.698	331.9	0.0	136.8										
46410.0	46522.C	0.251	5.8	3.5	-0.21	0.788	83.5	0.402	0.709	170.2	320.9	0.424D	0.994	7.19	1.734	79.1	296.7	19.6	0.634
		5.54	16.71	22.25	ONE	0.698	331.9	0.0	140.4										
46420.0	46522.C	0.242	8.0	2.9	-0.16	0.779	87.1	0.406	0.701	175.8	316.3	0.417D	0.986	7.13	1.729	77.8	299.6	18.6	0.657
		5.39	17.36	22.75	ONE	0.698	331.9	0.0	143.2										
46430.0	46522.0	0.244	3.6	1.1	-0.13	0.774	91.5	0.412	0.697	182.2	312.5	0.410D	0.984A	7.09	1.727	76.6	301.8	17.8	0.677
		5.41	17.96	23.38	ONE	0.698	331.9	0.0	145.5										
46440.0	46522.C	0.264	357.3	-1.5	-0.12	0.777	97.1	0.421	0.699	189.9	310.0	0.405D	0.994A	7.06	1.728	75.8	303.3	17.2	0.696
		5.75	18.53	24.28	ONE	0.698	331.9	0.0	147.0										
46450.0	46522.C	0.312	351.0	-4.2	-0.11	0.796	103.8	0.437	0.715	199.3	309.3	0.402D	1.027A	7.04	1.737	75.1	303.8	16.7	0.715
		6.63	19.07	25.70	ONE	0.698	331.9	0.0	147.7										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
46460.0	46522.C	0.398	346.3	-6.1	-0.10	0.841	111.9	0.467	0.756	211.1	310.9	0.403D	1.109A	7.02	1.759	74.9	303.0	16.4	0.736
		8.39	19.69	28.08	ONE	0.698	331.9	0.0	147.2										
46470.0	46522.C	0.534	344.0	-7.0	-0.10	0.933	121.0	0.528	0.865	225.8	315.4	0.408D	1.322A	7.00	1.806	74.9	300.3	16.1	0.768
		11.56	20.63	32.19	ONE	0.698	331.9	0.0	145.0										
ARRIVAL DATE = 2446524.0																			
46360.0	46524.C	0.332	349.8	0.3	1.79	0.843	72.9	0.406	0.770	150.6	357.4	0.458D	1.083	5.36	1.752	89.2	267.8	20.3	0.471
		7.02	11.55	18.97	TWO	0.723	337.7	0.0	108.8										
46370.0	46524.C	0.314	354.3	5.3	2.79	0.834	74.6	0.399	0.758	153.7	350.5	0.456D	1.061	4.29	1.746	87.3	274.9	15.8	0.479
		6.67	12.18	18.85	TWO	0.723	337.7	0.0	116.1										
46380.0	46524.C	0.311	354.1	17.0	6.83	0.825	76.6	0.393	0.746	157.2	344.0	0.453D	1.040	0.18	1.740	85.5	280.8	0.6	0.484
		6.61	12.33	18.93	TWO	0.723	337.7	0.0	123.2										
46390.0	46524.C	0.347	17.7	-28.4	-13.63	0.815	78.7	0.390	0.735	161.1	337.7	0.448D	1.022	20.57	1.734	83.8	295.7	54.9	0.740
		7.32	19.81	27.12	ONE	0.723	337.7	0.0	115.3										
46400.0	46524.C	0.262	12.5	-6.2	-3.46	0.805	81.2	0.389	0.724	165.6	332.1	0.443D	1.006	10.33	1.729	82.3	293.0	31.3	0.592
		5.71	15.47	21.18	ONE	0.723	337.7	0.0	127.5										
46410.0	46524.C	0.243	11.4	-2.3	-2.01	0.795	84.1	0.389	0.715	170.6	327.0	0.437D	0.993	8.80	1.723	80.9	296.3	26.0	0.593
		5.40	15.51	20.91	ONE	0.723	337.7	0.0	132.5										
46420.0	46524.C	0.233	8.6	-1.6	-1.45	0.788	87.6	0.391	0.708	176.3	322.6	0.431D	0.985	8.16	1.719	79.7	299.3	23.4	0.605
		5.24	15.85	21.09	ONE	0.723	337.7	0.0	136.0										
46430.0	46524.C	0.235	3.4	-2.8	-1.16	0.785	92.0	0.396	0.705	183.0	319.1	0.426D	0.984A	7.79	1.718	78.7	301.5	21.7	0.619
		5.27	16.25	21.52	ONE	0.723	337.7	0.0	138.7										
46440.0	46524.C	0.256	356.5	-4.8	-0.99	0.790	97.3	0.404	0.709	191.1	316.9	0.422D	0.996A	7.54	1.720	78.0	302.9	20.4	0.632
		5.61	16.65	22.26	ONE	0.723	337.7	0.0	140.4										
46450.0	46524.C	0.305	350.0	-6.8	-0.89	0.809	103.8	0.420	0.726	200.9	316.5	0.421D	1.031A	7.35	1.729	77.5	303.2	19.5	0.646
		6.48	17.06	23.55	ONE	0.723	337.7	0.0	141.0										
46460.0	46524.C	0.390	345.4	-8.1	-0.84	0.854	111.5	0.451	0.769	213.0	318.5	0.422D	1.115A	7.18	1.752	77.4	302.0	18.8	0.663
		8.22	17.56	25.78	ONE	0.723	337.7	0.0	140.3										
46470.0	46524.C	0.523	343.3	-8.4	-0.81	0.943	120.2	0.514	0.878	227.8	323.2	0.427D	1.329A	7.03	1.797	77.7	298.8	18.1	0.691
		11.29	18.38	29.67	ONE	0.723	337.7	0.0	137.7										
ARRIVAL DATE = 2446526.0																			
46360.0	46526.C	0.331	348.9	2.6	2.78	0.845	73.0	0.402	0.772	150.4	362.8	0.462	1.083	4.50	1.743	90.8	263.1	17.9	0.446
		7.00	11.23	18.23	TWO	0.749	343.3	0.0	99.3										
46370.0	46526.C	0.313	353.1	8.0	3.90	0.837	74.9	0.393	0.761	153.6	356.1	0.461D	1.060	3.24	1.737	88.9	270.8	12.7	0.446
		6.65	11.24	17.89	TWO	0.749	343.3	0.0	107.0										
46380.0	46526.C	0.306	353.9	17.5	6.91	0.828	76.9	0.387	0.749	157.2	349.6	0.460D	1.039	0.09	1.731	87.1	277.5	0.4	0.450
		6.52	11.34	17.86	TWO	0.749	343.3	0.0	114.2										
46390.0	46526.C	0.575	330.7	41.9	32.81	0.819	79.1	0.382	0.738	161.3	344.0	0.457D	1.020	-25.94	1.726	85.6	298.4	-66.7	0.819
		12.56	22.14	34.70	TWO	0.749	343.3	0.0	106.3										
46400.0	46526.C	0.301	19.3	-24.5	-10.83	0.810	81.6	0.379	0.729	165.7	337.7	0.452D	1.005	17.58	1.720	83.9	295.1	51.0	0.665
		6.43	17.60	24.03	ONE	0.749	343.3	0.0	114.8										
46410.0	46526.C	0.245	14.4	-11.1	-4.82	0.801	84.5	0.378	0.720	170.8	332.8	0.448D	0.992	11.43	1.716	82.6	295.6	35.6	0.579
		5.44	15.10	20.54	ONE	0.749	343.3	0.0	123.2										
46420.0	46526.0	0.229	10.1	-7.6	-3.16	0.795	88.0	0.379	0.714	176.8	328.6	0.443D	0.985	9.63	1.712	81.5	298.2	29.8	0.570
		5.18	14.84	20.02	ONE	0.749	343.3	0.0	127.8										
46430.0	46526.C	0.230	3.9	-7.4	-2.40	0.793	92.3	0.383	0.712	183.7	325.4	0.439D	0.985A	8.73	1.711	80.6	300.4	26.5	0.574
		5.18	14.94	20.13	ONE	0.749	343.3	0.0	131.0										
46440.0	46526.C	0.250	356.4	-8.4	-1.99	0.799	97.5	0.391	0.717	192.0	323.5	0.436D	0.997A	8.16	1.714	80.0	301.7	24.3	0.581
		5.52	15.15	20.67	ONE	0.749	343.3	0.0	133.0										
46450.0	46526.C	0.299	346.5	-9.5	-1.74	0.819	103.8	0.407	0.734	202.1	323.4	0.435D	1.033A	7.75	1.723	79.6	301.8	22.8	0.590
		6.39	15.42	21.81	ONE	0.749	343.3	0.0	133.6										
46460.0	46526.C	0.384	345.0	-10.0	-1.60	0.863	111.2	0.439	0.778	214.4	325.5	0.437D	1.119A	7.42	1.746	79.7	300.2	21.5	0.604
		8.08	15.82	23.90	ONE	0.749	343.3	0.0	132.8										
46470.0	46526.C	0.514	343.1	-9.8	-1.52	0.949	119.5	0.502	0.887	229.2	330.2	0.441D	1.332A	7.13	1.790	80.1	296.4	20.4	0.630
		11.06	16.57	27.63	ONE	0.749	343.3	0.0	129.8										
ARRIVAL DATE = 2446528.0																			
46360.0	46528.C	0.333	348.3	4.2	3.49	0.846	73.0	0.401	0.773	150.2	368.2	0.463	1.083	3.92	1.736	92.3	258.1	15.8	0.436
		7.03	10.94	17.97	TWO	0.777	348.9	0.0	89.2										
46370.0	46528.C	0.314	352.4	9.7	4.57	0.838	75.0	0.391	0.762	153.4	361.5	0.464	1.060	2.63	1.730	90.4	266.1	10.7	0.428
		6.66	10.72	17.38	TWO	0.777	348.9	0.0	97.0										
46380.0	46528.C	0.304	353.9	17.8	6.94	0.830	77.0	0.382	0.751	157.0	355.1	0.464D	1.039	0.06	1.725	88.6	273.3	0.3	0.427
		6.47	10.68	17.15	TWO	0.777	348.9	0.0	104.3										
46390.0	46528.C	0.356	345.9	34.4	15.32	0.822	79.3	0.376	0.741	161.2	349.3	0.462D	1.020	-8.50	1.720	87.1	280.4	-31.4	0.488
		7.51	12.44	19.94	TWO	0.777	348.9	0.0	108.2										
46410.0	46528.C	0.276	19.7	-24.4	-9.91	0.806	84.7	0.371	0.724	170.9	338.4	0.456D	0.992	16.34	1.710	84.2	295.4	50.1	0.624
		5.96	16.40	22.36	ONE	0.777	348.9	0.0	112.4										
46420.0	46528.C	0.235	12.9	-15.5	-5.58	0.801	88.3	0.371	0.718	177.0	334.4	0.452D	0.985	11.82	1.707	83.2	296.6	38.3	0.560
		5.27	14.54	19.81	ONE	0.777	348.9	0.0	118.6										
46430.0	46528.C	0.229	5.4	-12.9	-3.96	0.799	92.5	0.374	0.717	184.2	331.4	0.449D	0.985A	10.00	1.706	82.3	298.5	32.6	0.546
		5.18	14.12	19.30	ONE	0.777	348.9	0.0	122.5										
46440.0	46528.0	0.248	357.0	-12.4	-3.15	0.806	97.6	0.381	0.723	192.7	329.7	0.447D	0.998A	8.97	1.709	81.8	299.7	29.0	0.544
		5.48	14.06	19.54	ONE	0.777	348.9	0.0	124.8										
46450.0	46528.C	0.296	349.7	-12.4	-2.68	0.826	103.7	0.397	0.741	202.9	329.7	0.446D	1.035A	8.28	1.719	81.5	299.5	26.6	0.547
		6.32	14.17	20.49	ONE	0.777	348.9	0.0	125.6										
46460.0	46528.C	0.379	345.0	-12.0	-2.40	0.870	110.9	0.429	0.785	215.3	332.0	0.448D	1.121A	7.75	1.741	81.7	297.5	24.6	0.558
		7.97	14.47	22.45	ONE	0.777	348.9	0.0	124.6										
46470.0	46528.0	0.505	343.2	-11.2	-2.24	0.951	118.9	0.493	0.891	230.1	336.6	0.452D	1.330A	7.31	1.784	82.3	293.3	22.7	0.582
		10.85	15.18	26.03	ONE	0.777	348.9	0.0	121.4										
ARRIVAL DATE = 2446530.0																			
46360.0	46530.C	0.336	348.0	5.4	4.04	0.847	72.8	0.402	0.774	150.0	373.5	0.462	1.085	3.50	1.732	93.9	253.1	13.9	0.439
		7.10	11.05	18.15	TWO	0.805	354.5	0.0	79.0										
46370.0	46530.C	0.316	352.1	10.8	5.03	0.839	74.9	0.390	0.763	153.2	366.8	0.465	1.061	2.24	1.726	91.9	261.1	9.1	0.424
		6.70	10.60	17.31	TWO	0.805	354.5	0.0	86.7										
46380.0	46530.C	0.303	354.0	18.0	6.96	0.831	77.0	0.381	0.753	156.8	360.4	0.466	1.039	0.05	1.721	90.1	268.4	0.2	0.416
		6.46	10.37	16.83	TWO	0.805	354.5	0.0	94.0										
46390.0	46530.C	0.321	350.3	30.1	11.85	0.823	79.4	0.373	0.743	161.0	354.7	0.466D	1.020	-5.09	1.716	88.5	275.2	-20.4	0.437
		6.79	10.97	17.77	TWO	0.805	354.5	0.0	100.0										
46410.0	46530.C	0.412	26.8	-40.6	-22.05	0.809	84.8	0.365	0.726	170.8	343.4	0.461D	0.992	28.31	1.707	85.6	305.0	72.6	0.846
		8.71	22.93	31.63	ONE	0.805	354.5	0.0	101.2										
46420.0	46530.C	0.260	17.6	-25.6	-9.40	0.804	88.4	0.364	0.721	177.1	339.8	0.459D	0.984	15.41	1.704	84.7	294.6	49.8	0.590
		5.69	15.43	21.12	ONE	0.805	354.5	0.0	108.9										

DEPART	ARRIVE	SPEED / DV1	R A / DV2	DECL / DVT	I 1 / LEG	V 1 / CDIST	PSI 1 / RAS	ECCEN / DECLS	SMA / LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
46430.0	46530.C	0.237	8.1	-19.4	-6.05	0.804	92.5	0.367	0.721	184.4	337.0	0.456D	0.985A	11.81	1.704	83.9	295.8	40.1	0.538
		5.30	13.91	19.21	ONE	0.805	354.5	0.0	113.4										
46440.0	46530.C	0.250	358.6	-16.8	-4.57	0.811	97.6	0.374	0.727	193.0	335.5	0.455D	0.999A	10.06	1.707	83.4	296.7	34.6	0.522
		5.51	13.43	18.93	ONE	0.805	354.5	0.0	116.0										
46450.0	46530.C	0.294	350.6	-15.3	-3.76	0.831	103.5	0.390	0.745	203.4	335.7	0.455D	1.036A	8.96	1.717	83.2	296.3	30.8	0.518
		6.30	13.32	19.62	ONE	0.805	354.5	0.0	116.9										
46460.0	46530.C	0.375	345.6	-13.9	-3.28	0.873	110.5	0.422	0.788	215.8	338.0	0.456D	1.121A	8.18	1.738	83.5	294.0	27.9	0.525
		7.89	13.52	21.41	ONE	0.805	354.5	0.0	115.9										
46470.0	46530.C	0.497	343.6	-12.4	-3.00	0.951	118.4	0.485	0.891	230.4	342.4	0.459D	1.322A	7.56	1.780	84.3	289.5	25.1	0.548
		10.66	14.19	24.85	ONE	0.805	354.5	0.0	112.6										
ARRIVAL DATE = 2446532.0																			
46360.0	46532.C	0.342	347.9	6.3	4.48	0.847	72.5	0.406	0.774	149.7	378.8	0.460	1.088	3.19	1.730	95.4	248.6	12.1	0.456
		7.22	11.52	18.74	TWO	0.834	360.0	0.0	69.1										
46370.0	46532.C	0.320	352.1	11.5	5.37	0.840	74.6	0.392	0.763	152.9	372.0	0.464	1.063	1.96	1.725	93.4	256.3	7.8	0.433
		6.79	10.85	17.64	TWO	0.834	360.0	0.0	76.4										
46380.0	46532.C	0.305	354.4	18.1	6.97	0.832	76.9	0.381	0.753	156.6	365.7	0.466	1.040	0.04	1.720	91.6	263.5	0.2	0.417
		6.49	10.41	16.90	TWO	0.834	360.0	0.0	83.5										
46390.0	46532.C	0.308	352.6	27.8	10.36	0.825	79.3	0.372	0.744	160.7	359.9	0.467D	1.021	-3.66	1.715	90.0	270.1	-15.1	0.421
		6.55	10.52	17.07	TWO	0.834	360.0	0.0	90.1										
46400.0	46532.C	0.411	340.6	42.2	21.24	0.817	82.0	0.366	0.735	165.6	354.9	0.466D	1.004	-14.84	1.710	88.6	276.6	-51.3	0.561
		8.67	14.56	23.23	TWO	0.834	360.0	0.0	94.1										
46420.0	46532.C	0.334	24.2	-37.0	-16.43	0.807	88.3	0.361	0.723	177.0	344.9	0.462D	0.985	22.22	1.704	86.0	293.8	65.4	0.707
		7.06	18.83	25.90	ONE	0.834	360.0	0.0	99.7										
46430.0	46532.C	0.257	12.5	-27.0	-9.06	0.807	92.5	0.362	0.723	184.4	342.4	0.461D	0.985A	14.55	1.704	85.3	292.3	49.4	0.562
		5.63	14.60	20.23	ONE	0.834	360.0	0.0	104.3										
46440.0	46532.C	0.256	1.3	-21.8	-6.38	0.814	97.4	0.369	0.729	193.1	341.0	0.460D	0.998A	11.54	1.707	84.9	292.8	41.0	0.519
		5.62	13.34	18.96	ONE	0.834	360.0	0.0	107.0										
46450.0	46532.C	0.295	352.3	-18.6	-5.04	0.833	103.3	0.385	0.747	203.4	341.2	0.460D	1.035A	9.87	1.717	84.8	292.2	35.5	0.504
		6.31	12.92	19.23	ONE	0.834	360.0	0.0	108.0										
46460.0	46532.C	0.371	346.7	-16.0	-4.27	0.874	110.2	0.416	0.789	215.8	343.4	0.461D	1.117A	8.75	1.737	85.1	289.9	31.4	0.506
		7.82	12.97	20.79	ONE	0.834	360.0	0.0	106.9										
46470.0	46532.C	0.489	344.5	-13.7	-3.82	0.948	117.8	0.478	0.886	230.1	347.6	0.463D	1.310A	7.90	1.777	86.0	285.4	27.5	0.527
		10.47	13.59	24.07	ONE	0.834	360.0	0.0	103.6										
ARRIVAL DATE = 2446534.0																			
46360.0	46534.0	0.351	347.9	7.0	4.86	0.846	72.0	0.412	0.773	149.4	384.0	0.454	1.092	2.96	1.731	96.9	245.0	10.6	0.484
		7.39	12.34	19.73	TWO	0.864	5.5	0.0	60.1										
46370.0	46534.C	0.327	352.3	12.0	5.64	0.839	74.2	0.397	0.763	152.6	377.2	0.460	1.066	1.76	1.726	94.9	252.1	6.7	0.453
		6.91	11.44	18.35	TWO	0.864	5.5	0.0	66.8										
46380.0	46534.C	0.309	354.9	18.1	6.97	0.832	76.6	0.384	0.753	156.2	370.8	0.464	1.043	0.03	1.721	93.0	259.0	0.1	0.431
		6.56	10.79	17.35	TWO	0.864	5.5	0.0	73.5										
46390.0	46534.C	0.303	354.4	26.3	9.52	0.825	79.0	0.374	0.744	160.4	365.0	0.466	1.022	-2.88	1.716	91.4	265.3	-11.8	0.423
		6.46	10.58	17.04	TWO	0.864	5.5	0.0	80.0										
46400.0	46534.C	0.345	347.2	38.0	15.70	0.818	81.7	0.366	0.736	165.2	360.0	0.466D	1.005	-9.42	1.712	90.0	270.7	-36.1	0.475
		7.28	12.08	19.37	TWO	0.864	5.5	0.0	86.1										
46420.0	46534.C	0.559	29.8	-45.2	-33.18	0.808	88.0	0.360	0.724	176.5	349.2	0.464D	0.985	38.75	1.706	87.2	342.2	86.9	1.068
		12.16	29.49	41.65	ONE	0.864	5.5	0.0	92.8										
46430.0	46534.C	0.305	18.9	-35.3	-13.88	0.808	92.3	0.360	0.724	184.0	347.3	0.463D	0.985A	19.09	1.706	86.6	288.0	60.9	0.638
		6.49	16.80	23.29	ONE	0.864	5.5	0.0	96.1										
46440.0	46534.C	0.271	5.5	-27.5	-8.83	0.815	97.2	0.366	0.730	192.8	346.0	0.462D	0.997A	13.68	1.709	86.3	288.2	48.3	0.540
		5.88	13.96	19.84	ONE	0.864	5.5	0.0	98.4										
46450.0	46534.C	0.299	354.9	-22.1	-6.61	0.834	103.0	0.381	0.748	203.1	346.3	0.462D	1.033A	11.08	1.718	86.2	287.6	40.6	0.507
		6.38	12.99	19.38	ONE	0.864	5.5	0.0	99.2										
46460.0	46534.C	0.369	348.4	-18.2	-5.42	0.872	109.7	0.412	0.788	215.3	348.4	0.463D	1.112A	9.49	1.738	86.6	285.3	34.8	0.501
		7.77	12.82	20.59	ONE	0.864	5.5	0.0	98.0										
46470.0	46534.C	0.482	345.7	-15.0	-4.72	0.943	117.3	0.471	0.879	229.4	352.3	0.465D	1.293A	8.35	1.776	87.5	281.1	29.7	0.520
		10.30	13.36	23.66	ONE	0.864	5.5	0.0	94.8										
ARRIVAL DATE = 2446536.0																			
46360.0	46536.C	0.362	348.C	7.4	5.19	0.846	71.3	0.421	0.773	149.1	389.2	0.447	1.098	2.78	1.735	98.5	242.4	9.2	0.523
		7.62	13.46	21.08	TWO	0.893	11.0	0.0	51.9										
46370.0	46536.0	0.336	352.6	12.3	5.86	0.839	73.7	0.404	0.762	152.2	382.3	0.454	1.070	1.61	1.730	96.4	248.9	5.7	0.485
		7.09	12.35	19.43	TWO	0.893	11.0	0.0	58.0										
46380.0	46536.C	0.314	355.6	18.0	6.98	0.831	76.1	0.390	0.753	155.8	375.9	0.459	1.046	0.03	1.725	94.5	255.2	0.1	0.455
		6.67	11.49	18.17	TWO	0.893	11.0	0.0	64.1										
46390.0	46536.C	0.303	356.C	25.1	8.97	0.824	78.6	0.378	0.743	159.9	370.1	0.462	1.024	-2.39	1.721	92.8	261.1	-9.4	0.438
		6.46	11.01	17.47	TWO	0.893	11.0	0.0	70.3										
46400.0	46536.C	0.320	351.4	34.8	13.08	0.817	81.4	0.369	0.735	164.7	364.9	0.464	1.007	-6.92	1.716	91.3	266.1	-27.0	0.456
		6.78	11.52	18.29	TWO	0.893	11.0	0.0	76.7										
4641C.0	46536.C	0.454	338.7	45.7	25.18	0.812	84.5	0.363	0.729	170.3	360.9	0.464	0.993	-19.42	1.713	90.2	267.8	-61.2	0.650
		9.64	17.16	26.80	TWO	0.893	11.0	0.0	83.7										
46430.0	46536.C	0.417	26.8	-42.6	-22.90	0.808	91.9	0.360	0.724	183.4	351.8	0.463D	0.984A	27.85	1.710	87.8	281.2	75.9	0.823
		8.81	22.25	31.06	ONE	0.893	11.0	0.0	90.0										
46440.0	46536.C	0.303	11.4	-33.7	-12.42	0.814	96.8	0.365	0.729	192.1	350.8	0.463D	0.996A	16.96	1.713	87.5	282.6	56.8	0.597
		6.45	15.60	22.05	ONE	0.893	11.0	0.0	90.9										
46450.0	46536.C	0.308	358.6	-26.2	-8.65	0.832	102.6	0.380	0.746	202.4	351.0	0.463D	1.029A	12.78	1.722	87.5	282.5	46.0	0.529
		6.55	13.63	20.18	ONE	0.893	11.0	0.0	91.0										
46460.0	46536.C	0.369	350.8	-20.6	-6.80	0.869	109.2	0.409	0.784	214.4	353.0	0.463D	1.104A	10.48	1.741	88.0	280.6	38.4	0.510
		7.76	13.08	20.84	ONE	0.893	11.0	0.0	89.7										
46470.0	46536.C	0.475	347.4	-16.4	-5.74	0.936	116.7	0.466	0.869	228.2	356.6	0.464D	1.273A	8.95	1.776	88.9	277.0	31.9	0.523
		10.13	13.47	23.60	ONE	0.893	11.0	0.0	86.6										
ARRIVAL DATE = 2446538.0																			
46360.0	46538.C	0.375	348.3	7.7	5.49	0.844	70.4	0.433	0.771	148.8	394.5	0.437	1.105	2.65	1.742	100.2	240.7	8.0	0.571
		7.90	14.87	22.77	TWO	0.923	16.6	0.0	44.7										
46370.0	46538.C	0.347	353.1	12.4	6.05	0.837	72.9	0.413	0.761	151.8	387.5	0.446	1.076	1.50	1.737	98.0	246.6	4.9	0.526
		7.31	13.54	20.86	TWO	0.923	16.6	0.0	50.1										
46380.0	46538.C	0.323	356.5	17.7	6.98	0.830	75.4	0.397	0.751	155.3	381.0	0.453	1.050	0.02	1.732	95.9	252.3	0.1	0.489
		6.83	12.49	19.32	TWO	0.923	16.6	0.0	55.7										
46390.0	46538.C	0.307	357.6	24.2	8.57	0.823	78.1	0.384	0.742	159.3	375.1	0.457	1.028	-2.05	1.728	94.2	257.7	-7.6	0.465
		6.53	11.77	18.30	TWO	0.923	16.6	0.0	61.4										
46400.0	46538.C	0.309	354.8	32.4	11.54	0.816	80.9	0.374	0.734	164.0	369.9	0.460	1.009	-5.50	1.723	92.7	262.4	-20.9	0.463
		6.57	11.73	18.30	TWO	0.923	16.6	0.0	67.5										

DEPART	ARRIVE	SPEED	R A	DECL	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
		DV1	DV2	DVT	LEG	CDIST	RAS	DECLS	LAMDA										
46410.0	46538.C	0.369	345.6	42.3	18.42	0.810	84.1	0.366	0.728	169.5	365.5	0.461	0.994	-12.84	1.720	91.5	265.1	-44.8	0.542
		7.77	14.01	21.78	TWO	0.923	16.6	0.0	74.9										
46440.0	46538.C	0.368	19.6	-39.8	-18.30	0.812	96.3	0.366	0.728	191.2	355.1	0.461D	0.994A	22.54	1.720	88.7	274.7	67.3	0.714
		7.75	19.05	26.80	ONE	0.923	16.6	0.0	85.4										
46450.0	46538.0	0.327	3.9	-30.8	-11.48	0.829	102.1	0.379	0.743	201.4	355.4	0.461D	1.025A	15.26	1.728	88.7	277.1	52.2	0.576
		6.91	14.99	21.90	ONE	0.923	16.6	0.0	84.2										
46460.0	46538.C	0.371	354.C	-23.4	-8.53	0.864	108.7	0.407	0.778	213.2	357.2	0.462D	1.095A	11.83	1.746	89.2	276.2	42.1	0.534
		7.82	13.77	21.59	ONE	0.923	16.6	0.0	82.3										
46470.0	46538.C	0.469	349.5	-18.0	-6.95	0.927	116.1	0.461	0.856	226.6	360.6	0.462	1.250A	9.75	1.779	90.2	273.4	34.0	0.538
		9.98	13.90	23.89	ONE	0.923	16.6	0.0	79.1										

ARRIVAL DATE = 2446540.0

46360.0	46540.C	0.392	348.6	7.8	5.76	0.843	69.3	0.448	0.770	148.5	399.8	0.425	1.114	2.54	1.752	102.0	240.0	6.9	0.629
		8.26	16.55	24.81	TWO	0.953	22.3	0.0	38.2										
46370.0	46540.0	0.361	353.7	12.4	6.22	0.836	71.9	0.426	0.760	151.3	392.7	0.436	1.083	1.41	1.747	99.6	245.3	4.2	0.576
		7.59	15.01	22.60	TWO	0.953	22.3	0.0	43.2										
46380.0	46540.C	0.334	357.5	17.4	6.99	0.828	74.6	0.408	0.750	154.7	386.1	0.444	1.055	0.02	1.742	97.5	250.5	0.1	0.533
		7.05	13.75	20.80	TWO	0.953	22.3	0.0	48.2										
46390.0	46540.C	0.313	359.2	23.3	8.26	0.821	77.3	0.393	0.741	158.7	380.1	0.450	1.032	-1.81	1.737	95.6	255.4	-6.3	0.501
		6.65	12.82	19.47	TWO	0.953	22.3	0.0	53.4										
46400.0	46540.C	0.306	357.8	30.4	10.50	0.814	80.2	0.381	0.733	163.3	374.8	0.454	1.012	-4.58	1.733	94.1	259.8	-16.5	0.487
		6.51	12.41	18.92	TWO	0.953	22.3	0.0	59.0										
46410.0	46540.C	0.332	351.3	39.1	15.00	0.808	83.4	0.372	0.726	168.7	370.3	0.456	0.996	-9.59	1.729	92.8	262.7	-33.8	0.517
		7.02	13.28	20.31	TWO	0.953	22.3	0.0	65.8										
46420.0	46540.C	0.477	339.4	47.3	27.18	0.804	87.1	0.367	0.721	175.0	367.0	0.457	0.986	-22.27	1.727	91.9	257.6	-63.6	0.730
		10.19	19.53	29.71	TWO	0.953	22.3	0.0	75.3										
46440.0	46540.C	0.516	28.9	-43.6	-29.68	0.809	95.7	0.368	0.725	189.9	358.8	0.458D	0.992A	33.62	1.729	89.7	245.1	80.4	0.971
		11.11	26.61	37.73	ONE	0.953	22.3	0.0	83.0										
46450.0	46540.C	0.365	11.2	-35.9	-15.73	0.824	101.4	0.380	0.739	199.9	359.4	0.458D	1.020A	19.17	1.736	89.8	270.7	59.7	0.661
		7.68	17.48	25.16	ONE	0.953	22.3	0.0	79.3										
46460.0	46540.C	0.379	358.4	-26.8	-10.82	0.857	108.0	0.406	0.771	211.5	361.1	0.458	1.084A	13.75	1.753	90.3	272.0	46.4	0.575
		7.99	14.99	22.97	ONE	0.953	22.3	0.0	76.2										
46470.0	46540.C	0.464	352.3	-19.9	-8.43	0.916	115.4	0.456	0.841	224.6	364.2	0.457	1.225A	10.83	1.783	91.3	270.4	36.4	0.564
		9.87	14.65	24.53	ONE	0.953	22.3	0.0	72.6										

ARRIVAL DATE = 2446542.0

46360.0	46542.0	0.412	349.1	7.7	6.03	0.841	67.9	0.466	0.768	148.2	405.4	0.410	1.125	2.47	1.765	104.0	240.1	6.1	0.695
		8.71	18.49	27.20	TWO	0.983	28.1	0.0	32.5										
46370.0	46542.C	0.377	354.4	12.2	6.37	0.834	70.7	0.441	0.758	150.9	398.1	0.423	1.092	1.34	1.760	101.4	244.9	3.6	0.635
		7.95	16.73	24.68	TWO	0.983	28.1	0.0	37.0										
46380.0	46542.C	0.347	358.6	17.0	6.99	0.826	73.5	0.421	0.748	154.1	391.3	0.433	1.062	0.02	1.755	99.1	249.6	0.1	0.585
		7.32	15.27	22.59	TWO	0.983	28.1	0.0	41.5										
46390.0	46542.C	0.323	1.C	22.4	8.01	0.819	76.4	0.404	0.739	157.9	385.2	0.440	1.037	-1.64	1.750	97.2	254.1	-5.2	0.546
		6.84	14.13	20.96	TWO	0.983	28.1	0.0	46.2										
46400.0	46542.C	0.309	C.6	28.7	9.73	0.812	79.4	0.390	0.730	162.4	379.7	0.445	1.015	-3.95	1.746	95.5	258.1	-13.3	0.522
		6.56	13.42	19.98	TWO	0.983	28.1	0.0	51.3										
46410.0	46542.C	0.316	356.1	36.3	12.90	0.806	82.7	0.380	0.724	167.7	375.0	0.449	0.999	-7.68	1.742	94.1	261.1	-26.2	0.526
		6.70	13.56	20.26	TWO	0.983	28.1	0.0	57.3										
46420.0	46542.C	0.383	346.2	44.4	19.88	0.801	86.4	0.373	0.719	173.8	371.4	0.45C	0.987	-15.21	1.739	93.1	260.8	-47.6	0.617
		8.07	16.21	24.29	TWO	0.983	28.1	0.0	65.9										
46450.0	46542.0	0.446	21.0	-40.5	-22.98	0.818	100.7	0.383	0.734	198.2	363.0	0.453	1.015A	26.08	1.747	90.8	258.7	69.3	0.821
		9.47	22.20	31.67	ONE	0.983	28.1	0.0	77.0										
46460.0	46542.C	0.398	4.4	-30.7	-14.09	0.848	107.2	0.407	0.763	209.6	364.7	0.452	1.073A	16.65	1.762	91.4	267.8	51.8	0.642
		8.40	16.95	25.34	ONE	0.983	28.1	0.0	71.8										
46470.0	46542.C	0.462	355.8	-22.1	-10.33	0.903	114.6	0.453	0.826	222.3	367.6	0.452	1.200A	12.34	1.790	92.4	268.1	39.4	0.602
		9.83	15.77	25.60	ONE	0.983	28.1	0.0	67.3										

ARRIVAL DATE = 2446544.C

46360.0	46544.C	0.436	349.5	7.6	6.28	0.838	66.3	0.487	0.765	148.1	411.1	0.392	1.139	2.43	1.780	106.2	240.8	5.4	0.771
		9.25	20.72	29.97	TWO	1.012	34.0	0.0	27.3										
46370.0	46544.C	0.398	355.2	11.9	6.52	0.831	69.3	0.460	0.755	150.5	403.6	0.408	1.102	1.29	1.775	103.4	245.3	3.2	0.703
		8.39	18.71	27.09	TWO	1.012	34.0	0.0	31.4										
46380.0	46544.C	0.364	359.8	16.5	6.99	0.824	72.3	0.436	0.745	153.5	396.7	0.42C	1.071	C.01	1.770	100.9	249.6	0.1	0.645
		7.67	17.03	24.69	TWO	1.012	34.0	0.0	35.6										
4639C.0	46544.C	0.336	2.8	21.6	7.80	0.816	75.3	0.417	0.736	157.2	390.3	0.429	1.043	-1.50	1.765	98.8	253.7	-4.4	0.599
		7.09	15.67	22.76	TWO	1.012	34.0	0.0	39.9										
46400.0	46544.C	0.315	3.4	27.2	9.14	0.809	78.4	0.402	0.728	161.5	384.7	0.435	1.020	-3.5C	1.761	97.0	257.4	-10.9	0.566
		6.69	14.72	21.41	TWO	1.012	34.0	0.0	44.5										
46410.0	46544.C	0.310	C.5	33.8	11.45	0.802	81.7	0.390	0.721	166.6	379.8	0.439	1.002	-6.43	1.757	95.5	260.4	-2C.7	0.555
		6.59	14.38	20.97	TWO	1.012	34.0	0.0	49.8										
4642C.0	46544.C	C.340	352.8	41.2	15.95	0.797	85.4	0.382	0.716	172.6	375.8	0.442	0.989	-11.52	1.754	94.4	261.5	-36.2	0.591
		7.18	15.45	22.63	TWO	1.012	34.0	0.0	57.0										
46430.0	46544.C	0.477	342.1	47.7	27.18	0.795	89.7	0.378	0.713	179.6	373.3	0.444	0.983	-23.31	1.753	93.7	253.1	-60.8	0.793
		10.19	21.38	31.57	TWO	1.012	34.0	0.0	67.7										
46460.0	46544.C	0.442	12.7	-35.2	-19.23	0.838	106.4	0.408	0.753	207.3	368.0	0.446	1.061A	21.42	1.774	92.3	261.8	59.0	0.755
		9.36	20.25	29.61	CNE	1.012	34.0	0.0	69.8										
46470.0	46544.C	0.467	C.5	-25.0	-12.94	0.890	113.8	0.451	0.809	219.7	370.7	0.444	1.174A	14.55	1.800	93.3	266.1	43.4	0.657
		9.94	17.38	27.32	ONE	1.012	34.0	0.0	63.5										

ARRIVAL DATE = 2446546.0

46360.0	46546.C	0.465	349.9	7.2	6.54	0.836	64.3	0.513	0.763	148.0	417.1	0.372	1.154	2.41	1.799	108.6	242.1	4.8	0.857
		9.90	23.26	33.16	TWO	1.042	40.1	0.0	22.4										
46370.0	46546.C	0.422	356.C	11.5	6.66	0.828	67.6	0.482	0.753	150.1	409.4	0.390	1.115	1.26	1.794	105.5	246.3	2.8	0.779
		8.92	20.67	29.89	TWO	1.042	40.1	0.0	26.3										
46380.0	46546.C	0.384	1.C	16.0	7.00	0.821	70.8	0.456	0.743	152.9	402.2	0.4C4	1.081	0.01	1.789	102.9	250.4	0.1	0.714
		8.09	19.C4	27.13	TWO	1.042	40.1	0.0	30.3										
4639C.0	46546.0	0.352	4.6	20.7	7.61	0.813	73.9	0.434	0.733	156.4	395.7	0.415	1.051	-1.40	1.784	100.6	254.2	-3.7	0.660
		7.41	17.46	24.87	TWO	1.042	40.1	0.0	34.2										
46400.0	46546.C	0.326	6.1	25.9	8.55	0.805	77.1	0.416	0.725	160.5	389.8	0.423	1.026	-3.16	1.779	98.6	257.6	-9.0	0.619
		6.90	16.26	23.16	TWO	1.042	40.1	0.0	38.4										
46410.0	46546.C	0.312	4.6	31.7	10.37	0.798	80.6	0.403	0.717	165.4	384.7	0.428	1.006	-5.56	1.775	97.0	260.5	-16.7	0.596
		6.62	15.57	22.19	TWO	1.042	40.1	0.0	43.1										
46420.0	46546.C	0.320	358.8	38.2	13.47	0.792	84.4	0.393	0.712	171.2	380.5	0.432	0.991	-9.29	1.772	95.7	262.2	-28.2	0.603
		6.79	15.79	22.58	TWO	1.042	40.1	0.0	49.1										

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
46430.0	46546.C	0.385	348.9	44.6	19.94	0.790	88.7	0.387	0.709	177.9	377.4	0.434	0.984	-16.37	1.771	94.8	260.2	-46.0	0.691
		8.11	18.37	26.48	TWO	1.042	40.1	0.0	57.9										
46460.0	46546.C	0.544	24.0	-38.9	-28.63	0.827	105.3	0.411	0.743	204.7	371.0	0.438	1.048A	30.45	1.789	93.2	246.3	68.7	0.972
		11.81	26.64	38.45	ONE	1.042	40.1	0.0	71.0										
46470.0	46546.C	0.485	6.9	-28.6	-16.84	0.874	112.8	0.449	0.792	216.9	373.7	0.436	1.148A	18.06	1.812	94.2	263.6	49.1	0.741
		10.37	19.84	30.21	ONE	1.042	40.1	0.0	61.7										
							ARRIVAL DATE = 2446548.0												
46360.0	46548.C	0.499	350.3	6.8	6.81	0.833	62.0	0.543	0.761	148.1	423.6	0.348	1.173	2.42	1.821	111.4	243.8	4.3	0.955
		10.70	26.15	36.84	TWO	1.072	46.4	0.0	17.9										
46370.0	46548.C	0.451	356.7	11.0	6.80	0.825	65.6	0.508	0.750	149.9	415.5	0.369	1.131	1.24	1.816	108.0	247.9	2.5	0.866
		9.57	23.53	33.11	TWO	1.072	46.4	0.0	21.6										
46380.0	46548.C	0.408	2.2	15.3	7.00	0.817	69.0	0.478	0.740	152.4	408.0	0.386	1.093	0.01	1.811	105.1	251.8	0.0	0.792
		8.62	21.33	29.95	TWO	1.072	46.4	0.0	25.3										
46390.0	46548.C	0.372	6.4	19.8	7.45	0.809	72.3	0.454	0.730	155.6	401.2	0.399	1.061	-1.32	1.806	102.6	255.4	-3.2	0.729
		7.83	19.50	27.32	TWO	1.072	46.4	0.0	29.1										
46400.0	46548.C	0.341	8.8	24.6	8.23	0.801	75.7	0.434	0.721	159.5	395.1	0.408	1.034	-2.90	1.801	100.4	258.6	-7.6	0.680
		7.19	18.06	25.25	TWO	1.072	46.4	0.0	33.0										
46410.0	46548.C	0.319	8.6	29.8	9.52	0.793	79.2	0.418	0.713	164.2	389.7	0.415	1.011	-4.93	1.797	98.6	261.4	-13.6	0.647
		6.76	17.07	23.82	TWO	1.072	46.4	0.0	37.2										
46420.0	46548.C	0.313	4.5	35.4	11.72	0.787	83.1	0.406	0.707	169.7	385.2	0.420	0.995	-7.81	1.793	97.2	263.4	-22.3	0.636
		6.65	16.74	23.39	TWO	1.072	46.4	0.0	42.3										
46430.0	46548.C	0.341	356.2	41.3	15.83	0.783	87.5	0.399	0.704	176.2	381.8	0.423	0.985	-12.57	1.792	96.2	263.4	-35.3	0.670
		7.21	17.77	24.97	TWO	1.072	46.4	0.0	49.3										
46440.0	46548.C	0.456	346.3	46.8	25.26	0.784	92.5	0.397	0.705	183.8	379.8	0.425	0.985A	-22.62	1.792	95.6	255.9	-54.9	0.838
		9.70	22.70	32.40	TWO	1.072	46.4	0.0	60.0										
46470.0	46548.C	0.536	16.1	-32.9	-23.43	0.858	111.7	0.449	0.774	213.8	376.5	0.426	1.122A	24.26	1.827	95.1	258.0	57.4	0.887
		11.60	24.15	35.75	ONE	1.072	46.4	0.0	62.7										
							ARRIVAL DATE = 2446550.0												
46360.0	46550.C	0.539	350.6	6.2	7.09	0.831	59.2	0.578	0.758	148.5	430.5	0.320	1.196	2.46	1.846	114.6	245.9	3.9	1.066
		11.66	29.44	41.11	TWO	1.101	53.0	0.0	13.5										
46370.0	46550.C	0.485	357.4	10.4	6.94	0.822	63.2	0.539	0.747	149.9	422.0	0.345	1.149	1.24	1.841	110.8	250.0	2.2	0.965
		10.37	26.46	36.83	TWO	1.101	53.0	0.0	17.1										
46380.0	46550.C	0.437	3.4	14.6	7.00	0.814	66.8	0.505	0.736	152.0	414.2	0.364	1.108	0.01	1.835	107.5	253.7	0.0	0.880
		9.27	23.93	33.20	TWO	1.101	53.0	0.0	20.7										
46390.0	46550.C	0.396	8.2	18.9	7.29	0.805	70.4	0.478	0.726	154.9	407.1	0.380	1.073	-1.26	1.830	104.8	257.2	-2.8	0.808
		8.34	21.81	30.16	TWO	1.101	53.0	0.0	24.3										
46400.0	46550.C	0.360	11.4	23.3	7.85	0.796	73.9	0.455	0.717	158.5	400.7	0.391	1.043	-2.71	1.826	102.4	260.3	-6.4	0.750
		7.58	20.10	27.68	TWO	1.101	53.0	0.0	28.0										
46410.0	46550.C	0.331	12.3	28.0	8.80	0.788	77.6	0.436	0.709	162.9	395.0	0.400	1.018	-4.46	1.821	100.4	263.0	-11.4	0.707
		7.00	18.83	25.83	TWO	1.101	53.0	0.0	31.9										
46420.0	46550.C	0.315	9.9	33.0	10.39	0.781	81.6	0.422	0.703	168.2	390.2	0.406	0.999	-6.77	1.818	98.8	265.1	-18.1	0.682
		6.68	18.10	24.78	TWO	1.101	53.0	0.0	36.4										
46430.0	46550.C	0.321	3.4	38.1	13.15	0.776	86.0	0.413	0.698	174.3	386.4	0.410	0.987	-10.21	1.815	97.6	266.0	-27.7	0.687
		6.80	18.26	25.07	TWO	1.101	53.0	0.0	42.0										
46440.0	46550.C	0.375	353.7	43.1	18.59	0.776	91.1	0.409	0.698	181.6	383.8	0.413	0.984A	-16.31	1.815	96.9	263.9	-41.8	0.760
		7.90	20.39	28.29	TWO	1.101	53.0	0.0	50.2										
46450.0	46550.C	0.561	346.7	48.1	32.49	0.782	97.0	0.413	0.704	190.1	383.1	0.413	0.995A	-30.84	1.818	96.7	246.0	-61.9	1.050
		12.21	28.95	41.16	TWO	1.101	53.0	0.0	62.7										
							ARRIVAL DATE = 2446552.0												
46360.0	46552.0	0.586	350.7	5.4	7.40	0.828	56.0	0.619	0.755	149.2	438.1	0.288	1.223	2.55	1.874	118.2	248.4	3.5	1.194
		12.83	33.23	46.06	TWO	1.130	59.9	0.0	9.2										
46370.0	46552.C	0.525	358.0	9.6	7.09	0.819	60.3	0.574	0.744	150.1	429.0	0.317	1.171	1.25	1.869	114.0	252.4	2.0	1.078
		11.33	29.80	41.14	TWO	1.130	59.9	0.0	12.7										
46380.0	46552.C	0.472	4.5	13.8	7.00	0.810	64.3	0.537	0.733	151.8	420.8	0.339	1.126	0.01	1.864	110.4	256.1	0.0	0.980
		10.06	26.89	36.96	TWO	1.130	59.9	0.0	16.2										
46390.0	46552.C	0.425	9.9	17.9	7.13	0.800	68.1	0.505	0.723	154.3	413.3	0.358	1.088	-1.22	1.858	107.3	259.5	-2.4	0.897
		8.98	24.45	33.43	TWO	1.130	59.9	0.0	19.8										
46400.0	46552.0	0.384	13.9	22.1	7.50	0.791	71.9	0.479	0.713	157.6	406.6	0.372	1.054	-2.56	1.853	104.7	262.6	-5.5	0.829
		8.08	22.43	30.51	TWO	1.130	59.9	0.0	23.3										
46410.0	46552.C	0.349	15.9	26.3	8.18	0.782	75.7	0.458	0.704	161.7	400.6	0.382	1.027	-4.10	1.849	102.5	265.2	-9.6	0.776
		7.36	20.86	28.22	TWO	1.130	59.9	0.0	27.0										
46420.0	46552.C	0.324	15.0	30.8	9.32	0.774	79.9	0.441	0.697	166.6	395.5	0.390	1.005	-6.02	1.845	100.7	267.4	-14.9	0.739
		6.85	19.79	26.64	TWO	1.130	59.9	0.0	31.0										
46430.0	46552.C	0.315	10.3	35.3	11.21	0.768	84.4	0.429	0.693	172.4	391.3	0.395	0.990	-8.63	1.842	99.3	268.8	-22.1	0.725
		6.68	19.38	26.06	TWO	1.130	59.9	0.0	35.8										
46440.0	46552.C	0.337	1.7	39.5	14.61	0.766	89.5	0.423	0.691	179.3	388.2	0.399	0.983	-12.72	1.841	98.3	268.5	-32.3	0.751
		7.11	20.14	27.25	TWO	1.130	59.9	0.0	42.1										
46450.0	46552.C	0.423	352.3	43.7	21.76	0.771	95.4	0.424	0.695	187.4	386.6	0.400	0.990A	-20.51	1.844	97.8	263.5	-47.2	0.873
		8.94	23.72	32.66	TWO	1.130	59.9	0.0	51.5										
							ARRIVAL DATE = 2446554.0												
46370.0	46554.C	0.573	358.4	8.8	7.25	0.815	56.9	0.616	0.741	150.6	436.8	0.284	1.197	1.29	1.901	117.7	255.2	1.8	1.208
		12.51	33.65	46.16	TWO	1.158	67.1	0.0	8.3										
46380.0	46554.C	0.513	5.4	12.9	7.01	0.806	61.3	0.574	0.729	151.8	428.1	0.311	1.148	0.01	1.895	113.7	258.9	0.0	1.095
		11.04	30.29	41.32	TWO	1.158	67.1	0.0	11.9										
4639C.0	46554.C	0.460	11.4	16.9	6.98	0.796	65.4	0.538	0.719	153.9	420.1	0.332	1.105	-1.20	1.890	110.2	262.3	-2.1	0.999
		9.78	27.45	37.23	TWO	1.158	67.1	0.0	15.4										
46400.0	46554.C	0.413	16.2	20.8	7.17	0.785	69.5	0.507	0.709	156.8	413.0	0.349	1.068	-2.46	1.884	107.2	265.4	-4.8	0.919
		8.71	25.09	33.80	TWO	1.158	67.1	0.0	18.9										
46410.0	46554.C	0.372	19.2	24.8	7.62	0.776	73.6	0.483	0.700	160.5	406.6	0.362	1.037	-3.84	1.880	104.8	268.0	-8.2	0.855
		7.83	23.19	31.02	TWO	1.158	67.1	0.0	22.4										
46420.0	46554.C	0.339	19.7	28.7	8.41	0.767	77.8	0.463	0.692	165.1	401.1	0.372	1.012	-5.46	1.875	102.7	270.3	-12.5	0.807
		7.16	21.77	28.93	TWO	1.158	67.1	0.0	26.2										
46430.0	46554.C	0.319	16.8	32.7	9.71	0.760	82.5	0.448	0.686	170.6	396.5	0.379	0.994	-7.52	1.872	101.1	271.9	-18.0	0.778
		6.76	20.93	27.69	TWO	1.158	67.1	0.0	30.3										
46440.0	46554.C	0.320	9.8	36.2	11.92	0.756	87.7	0.440	0.684	177.1	393.0	0.383	0.984	-10.44	1.871	99.9	272.5	-25.4	0.777
		6.78	20.90	27.68	TWO	1.158	67.1	0.0	35.4										
46450.0	46554.C	0.360	0.4	39.4	16.02	0.758	93.6	0.438	0.686	184.7	390.8	0.386	0.987A	-15.21	1.872	99.2	271.1	-35.9	0.827
		7.59	22.36	29.95	TWO	1.158	67.1	0.0	42.3										
46460.0	46554.0	0.485	352.7	43.5	25.26	0.772	100.5	0.446	0.697	193.6	390.1	0.386	1.007A	-25.08	1.878	99.2	262.5	-51.1	1.009
		10.36	27.76	38.12	TWO	1.158	67.1	0.0	52.8										

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EARTH-MERCURY

DEPART	ARRIVE	SPEED DV1	R A DV2	DECL DVT	I 1 LEG	V 1 CDIST	PSI 1 RAS	ECCEN DECLS	SMA LAMDA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
								ARRIVAL DATE = 2446556.0											
46380.0	46556.C	0.562	6.1	11.9	7.01	0.801	57.7	0.616	0.726	152.2	436.0	0.279	1.173	0.01	1.930	117.5	262.1	0.0	1.227
		12.23	34.20	46.43	TWO	1.185	74.7	0.0	7.4										
46390.0	46556.C	0.501	12.7	15.8	6.82	0.791	62.3	0.575	0.715	153.8	427.6	0.304	1.126	-1.20	1.924	113.6	265.5	-1.9	1.115
		10.76	30.89	41.66	TWO	1.185	74.7	0.0	11.0										
46400.0	46556.0	0.448	18.2	19.6	6.85	0.780	66.6	0.541	0.704	156.2	420.0	0.323	1.085	-2.41	1.919	110.2	268.6	-4.2	1.022
		9.51	28.12	37.63	TWO	1.185	74.7	0.0	14.6										
46410.0	46556.C	0.401	22.3	23.3	7.09	0.769	71.0	0.512	0.695	159.5	413.2	0.339	1.050	-3.66	1.913	107.4	271.3	-7.1	0.945
		8.46	25.85	34.31	TWO	1.185	74.7	0.0	18.1										
46420.0	46556.C	0.361	24.1	26.8	7.60	0.759	75.5	0.489	0.686	163.7	407.2	0.351	1.022	-5.06	1.909	105.1	273.6	-10.6	0.885
		7.61	24.C8	31.68	TWO	1.185	74.7	0.0	21.6										
46430.0	46556.C	0.331	22.8	30.3	8.48	0.750	80.3	0.471	0.680	168.7	402.2	0.359	1.000	-6.72	1.905	103.2	275.5	-14.9	0.843
		7.00	22.84	29.83	TWO	1.185	74.7	0.0	25.4										
46440.0	46556.0	0.317	17.6	33.3	9.92	0.745	85.6	0.459	0.676	174.8	398.2	0.366	0.987	-8.90	1.903	101.8	276.6	-20.5	0.823
		6.73	22.25	28.98	TWO	1.185	74.7	0.0	29.7										
46450.0	46556.C	0.331	9.1	35.7	12.42	0.745	91.7	0.454	0.677	182.0	395.4	0.369	0.984A	-12.07	1.904	100.9	276.5	-27.9	0.835
		7.00	22.62	29.62	TWO	1.185	74.7	0.0	34.9										
46460.0	46556.C	0.393	C.1	37.8	17.22	0.755	98.6	0.458	0.685	190.4	394.0	0.371	0.999A	-17.51	1.908	100.5	274.0	-38.3	0.911
		8.28	24.84	33.12	TWO	1.185	74.7	0.0	42.2										
46470.0	46556.C	0.559	355.1	42.6	28.85	0.781	106.5	0.476	0.706	200.2	394.4	0.370	1.042A	-29.76	1.919	100.9	261.5	-53.4	1.165
		12.16	32.37	44.53	TWO	1.185	74.7	0.0	53.7										

Section 6

TABULAR TRAJECTORY DATA FOR VENUS SWINGBY MISSIONS TO MERCURY

Introduction

The trajectory data are presented chronologically and are organized by holding the arrival date constant while varying the Earth departure date in increments of 10 days. Upon completion of the specified range of Earth departure dates, the arrival date is incremented by 2 days and the range of departure dates is repeated. The range of departure and arrival dates are given in Table 6-1 for each launch opportunity. The criterion used for the selection of these dates is that they encompass the region in which the Venus encounter ΔV requirements are equal to or less than 1000 m/sec.

TABLE 6-1

RANGES OF DEPARTURE AND ARRIVAL DATES (SWINGBY MISSIONS)

	Earth Departure Date	Mercury Arrival Date
1973	41920 - 42060	42118 - 42150
1975	42530 - 42620	42724 - 42744
1978	43630 - 43810	43860 - 43896
1980	44110 - 44390	44576 - 44612
1982	44780 - 45100	45270 - 45340
1983	45470 - 45540	45604 - 45642
1985	46100 - 46240	46436 - 46490

There are three lines of print for each mission. The first two lines contain the same parameters; the Earth-Venus trajectory data on line 1 and the Venus-Mercury trajectory data on line 2. The two leftmost columns of each line contain the dates of Earth departure-Venus swingby (line 1) and the dates of Venus swingby-Mercury arrival (line 2). The remaining 18 columns of each line can be divided into three groups: six columns of data related to departure, six columns pertinent to the heliocentric phase of the mission, and six columns related to arrival. The third line of print contains data related to the Venus encounter phase of the mission as well as certain general mission parameters. These include the periapsis radius, the elements of the encounter hyperbola, illumination conditions of the subperiapsis point and of approach, the ΔV requirements at Earth departure and Mercury arrival, and the swingby ΔV requirement.

The data which follow contain both unpowered and powered swingby trajectories. The powered encounter occurs if the unpowered swingby hyperbola has a periapsis radius of less than 1.05 planet radii. In this event the periapsis radius is constrained to a value of 1.05 radii and a ΔV is computed which would correct the asymptote direction at the activity sphere on the outbound leg (see Section 4).

For the powered swingby case there are in effect two sets of encounter trajectory parameters, one for the original unpowered hyperbola which passes below 1.05 radii and one for the hyperbola constrained to a periapsis of 1.05 radii. This situation is dealt with by defining the turn angle (KAPPA) and periapsis radius (PERIC) to be on the unpowered trajectory and the remaining (affected) elements (i.e., eccentricity (E), periapsis right ascension (RAP), declination (DECLP), velocity (VP), and illumination angle (ETA)) to be on the constrained (powered) swingby trajectory. It is thus implicit that when the value of PERIC is less than 1.05, the values of the five encounter parameters referred to above apply to a trajectory having a periapsis radius of 1.05 radii.

All data in this handbook are for posigrade trajectories having transfer angles of less than 360 degrees. In order to reduce the volume of the handbook, those trajectories for which the Earth departure excess speed exceeds 0.65 EMOS are not listed even though such trajectories may occur in the region of dates given in Table 6-1. Those missions for which the swingby ΔV at Venus is greater than 1000 m/sec are not printed.

Below are listed the symbols used in the tabular data and the definition of each.

Symbol	Definition
DEPART	Julian date (minus 2400000) at Earth departure
PASS	Julian date (minus 2400000) of Venus swingby
ARRIVE	Julian date (minus 2400000) of Mercury arrival
SPEED	Hyperbolic excess speed at departure (EMOS)
R A	Right ascension of hyperbolic excess velocity vector at departure, measured along the local planetary equator eastward from the "vernal equinox" (degrees)
DECL	Declination of the hyperbolic excess velocity vector at departure, measured positively northward and negatively southward from the local planetary equator (degrees)

I 1	Inclination of the transfer orbit to the departure planet's orbit plane. The angle is positive if the heliocentric velocity vector of the transfer trajectory is directed above the departure planet's orbit plane; the angle is negative if the velocity vector is directed below the departure planet's orbit plane (degrees)
V 1	Heliocentric speed of departure (EMOS)
PSI 1	Heliocentric angle of departure, measured counterclockwise from the outward-directed heliocentric radius vector to the departure velocity vector in the transfer plane (degrees)
ECCEN	Eccentricity of the transfer orbit
SMA	Semimajor axis of the transfer orbit (AU)
THET1	True anomaly in the transfer orbit at departure, reduced to $0 \leq \theta \leq 360$ (degrees)
THET2	True anomaly in the transfer orbit at arrival, THET2 minus THET1 equals the heliocentric transfer angle (degrees)
PERIH	Perihelion distance of the transfer orbit. If the vehicle does not transit aphelion, the value is followed by a "D" (AU)
APHEL	Aphelion distance of the transfer orbit. If the vehicle does not transit aphelion, the value is followed by an "A"; for values of ECCEN $\geq$ 1.0, the characters "NA" (for Not Applicable) are printed (AU)
I 2	Inclination of the transfer orbit to the arrival planet's orbit. The angle is positive if the heliocentric velocity vector of the transfer trajectory is directed above the target planet's orbit plane at arrival; the angle is negative if the velocity vector is directed below the target planet's orbit plane (degrees)
V 2	Heliocentric speed of arrival (EMOS)
PSI 2	Heliocentric angle of arrival, measured clockwise from the inward-directed heliocentric radius vector to the arrival velocity vector in the transfer plane (degrees)
R A	Right ascension of the hyperbolic excess velocity vector at arrival, measured along the local planetary equator eastward from the "vernal equinox." Note that this is the right ascension of the position at which the hyperbolic excess velocity vector (asymptote) would emerge from the planet's celestial sphere (degrees)
DECL	Declination of the hyperbolic excess velocity vector at arrival; this is the declination at which the velocity vector would emerge from the planet's celestial sphere (degrees)
SPEED	Hyperbolic excess speed at arrival (EMOS)

DV1	Impulsive velocity (ΔV) necessary to attain the required excess speed at Earth departure. Departure is from a circular orbit of 185-km altitude (km/sec)
DV2	Impulsive velocity (ΔV) necessary to enter a circular orbit at Mercury. The orbit altitude is 1000 km (km/sec)
DELVC	Swingby ΔV requirement. The field is left blank if the ΔV requirement is zero (i.e. PERIC $\geq$ 1.05) (m/sec)
LEG	Heliocentric transfer angle. A minus indicates the transfer angle is less than 180°, a plus indicates the transfer angle is greater than 180°. The first symbol refers to the Earth-Venus transfer, the second symbol refers to the Venus-Mercury transfer
KAPPA	Turn angle of the Venus encounter hyperbola, measured between the incoming hyperbolic excess velocity vector as it emerges from Venus' activity sphere and the outgoing excess velocity vector. For the powered swingby case (DELVC > 0.0), this is the turn angle of the unconstrained (unpowered) hyperbola (degrees)
DELK	Difference between the turn angles of the unpowered (unconstrained) and powered swingby hyperbolas. If the periapsis radius is equal to or greater than 1.05 radii, DELK is equal to zero (degrees)
RAS	Right ascension of the subsolar point at Venus, measured along the planetary equator eastward from the "vernal equinox" (degrees)
DECLS	Declination of the subsolar point at Venus, measured positively northward and negatively southward from the planetary equator (degrees)
CDIST1	Communication distance between Earth and Venus on the date of swingby (AU)
CDIST2	Communication distance between Earth and Mercury on the date of arrival (AU)
RAP	Right ascension of periapsis of the swingby hyperbola, measured along Venus' equator eastward from the "vernal equinox" (degrees)*
DECLP	Declination of periapsis of the swingby hyperbola measured positively northward and negatively southward from Venus' equator (degrees)*
VP	Velocity at periapsis passage (km/sec)*
-A	Negative semimajor axis of the swingby hyperbola (Venus radii)
E	Eccentricity of the swingby hyperbola*

* For the powered swingby case these parameters refer to the swingby hyperbola constrained to a periapsis of 1.05 radii.

INCL	Inclination of the swingby hyperbola (degrees)
LAM1	Venus approach illumination angle; it is the angle between Venus' heliocentric radius vector and the incoming hyperbolic excess velocity vector. A lightside approach directed through the subsolar point is defined as 0^{o} (degrees)
LAM2	Mercury approach illumination angle; it is the angle between Mercury's heliocentric radius vector and the incoming hyperbolic excess velocity vector. A lightside approach directed through the subsolar point is defined as 0^{o} (degrees)
ETA	Periapsis illumination angle; it is the angle between the periapsis radius vector and the Venus-Sun vector and defines the lighting conditions on the surface of Venus below the periapsis point. A lightside periapsis over the subsolar point is defined as 0^{o} (degrees)*
PERIC	Periapsis radius of the encounter hyperbola. For the powered swingby case (DELVC >0.0) this is the periapsis radius of the unconstrained (unpowered) hyperbola (Venus radii)

* For the powered swingby case these parameters refer to the swingby hyperbola constrained to a periapsis of 1.05 radii.

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
								ARRIVAL DATE = 2442120.0											
41980.0	42079.6	0.157	319.1	2.3	3.06	0.868	87.4	0.254	0.796	172.4	278.2	0.594D	0.997	-2.52	1.236	76.4	182.5	-10.2	0.297
42079.6	42120.0	0.297	233.4	-3.0	-0.92	0.985	101.6	0.359	0.551	202.5	284.1	0.353D	0.749A	4.10	1.648	72.2	306.6	8.6	0.746
4.19	20.00	781.9	-/-	51.0	5.1	185.6	0.0	0.280	0.756	114.5	-8.0	13.353	0.672	2.563	11.2	169.3	163.1	71.3	0.889
41990.0	42080.4	0.155	318.1	1.8	3.01	0.864	89.2	0.260	0.787	177.7	274.9	0.583D	0.992	-1.99	1.230	75.8	185.4	-7.8	0.306
42080.4	42120.0	0.306	232.7	-2.9	-0.93	0.988	102.4	0.362	0.553	204.0	284.2	0.353D	0.754A	4.08	1.650	72.1	306.6	8.6	0.750
4.16	20.10	501.9	-/-	47.4	3.2	186.9	0.0	0.282	0.756	116.9	-5.9	13.530	0.633	2.658	8.4	172.1	163.1	70.1	0.944
42000.0	42081.2	0.157	315.0	0.5	3.02	0.862	91.4	0.267	0.782	183.9	272.4	0.573D	0.990A	-1.46	1.227	75.2	187.8	-5.5	0.315
42081.2	42120.0	0.315	232.1	-2.9	-0.93	0.992	103.2	0.365	0.556	205.4	284.4	0.353D	0.758A	4.06	1.652	72.0	306.6	8.5	0.754
4.20	20.21	277.0	-/-	44.2	1.7	188.2	0.0	0.285	0.756	118.9	-3.5	13.717	0.596	2.760	5.7	174.5	163.1	69.4	0.990
42010.0	42081.9	0.169	310.1	-1.7	3.11	0.863	94.2	0.275	0.780	191.3	270.9	0.566D	0.995A	-0.92	1.226	74.7	189.8	-3.3	0.325
42081.9	42120.0	0.325	231.5	-2.8	-0.93	0.996	103.9	0.369	0.558	206.9	284.6	0.353D	0.764A	4.04	1.655	71.9	306.6	8.4	0.757
4.33	20.31	152.9	-/-	41.7	0.9	189.5	0.0	0.287	0.756	120.1	-0.8	13.918	0.561	2.871	3.4	176.6	163.1	69.3	1.017
42020.0	42082.9	0.184	304.6	-4.5	3.27	0.870	97.7	0.284	0.787	200.4	271.2	0.563D	1.010A	-0.33	1.230	74.2	190.9	-1.2	0.336
42082.9	42120.0	0.336	230.9	-2.7	-0.94	1.001	104.9	0.372	0.561	208.5	284.9	0.352D	0.770A	4.01	1.658	71.8	306.5	8.3	0.761
4.65	20.44	187.4	-/-	40.0	1.1	190.9	0.0	0.290	0.756	120.4	2.3	14.148	0.525	3.001	3.0	178.8	163.1	70.4	1.009
42030.0	42083.7	0.238	299.8	-7.3	3.53	0.890	102.0	0.289	0.807	212.1	274.4	0.566D	1.049A	0.32	1.243	73.7	190.8	1.1	0.350
42083.7	42120.0	0.350	230.3	-2.6	-0.95	1.007	105.8	0.377	0.565	210.4	285.2	0.352D	0.778A	3.99	1.662	71.7	306.4	8.2	0.766
5.32	20.59	506.0	-/-	39.6	2.9	192.4	0.0	0.293	0.756	119.2	5.5	14.442	0.484	3.168	5.6	178.1	163.0	73.3	0.946
								ARRIVAL DATE = 2442122.0											
41950.0	42078.3	0.171	310.9	3.6	3.97	0.887	84.0	0.234	0.829	159.4	292.7	0.635D	1.023	-4.52	1.256	78.8	173.3	-21.4	0.267
42078.3	42122.0	0.266	231.0	-5.0	-1.35	1.005	100.3	0.324	0.564	203.1	292.7	0.381D	0.746A	4.11	1.639	75.1	307.1	10.0	0.652
4.36	17.24	781.2	-/-	58.2	5.4	183.6	0.0	0.277	0.784	105.9	-15.7	12.770	0.834	2.259	22.6	156.4	157.5	78.2	0.881
41960.0	42079.0	0.164	315.0	3.1	3.55	0.882	84.9	0.228	0.818	163.4	288.1	0.623D	1.013	-3.75	1.250	78.1	176.7	-17.0	0.273
42079.0	42122.0	0.273	230.5	-4.9	-1.36	1.007	100.8	0.326	0.565	204.4	292.8	0.381D	0.749A	4.08	1.641	75.1	307.1	9.9	0.655
4.28	17.30	416.0	-/-	53.9	2.9	194.7	0.0	0.279	0.784	109.8	-12.9	12.894	0.794	2.323	18.2	161.2	157.6	75.3	0.957
41970.0	42079.8	0.158	317.7	3.1	3.29	0.876	86.1	0.243	0.808	167.7	283.8	0.611D	1.005	-3.11	1.243	77.4	180.1	-13.6	0.281
42079.8	42122.0	0.281	229.9	-4.8	-1.36	1.010	101.5	0.329	0.567	205.8	293.0	0.381D	0.753A	4.05	1.642	75.0	307.0	9.8	0.657
4.21	17.33	81.2	-/-	49.8	0.6	186.0	0.0	0.281	0.784	113.2	-10.3	13.042	0.750	2.399	14.5	165.2	157.6	73.1	1.031
41980.0	42080.5	0.154	318.6	3.0	3.14	0.871	87.6	0.249	0.798	172.6	280.0	0.600D	0.997	-2.54	1.238	76.8	183.2	-10.6	0.289
42080.5	42122.0	0.289	229.3	-4.7	-1.36	1.014	102.1	0.331	0.569	207.3	293.2	0.381D	0.758A	4.02	1.645	74.9	307.0	9.7	0.660
4.15	17.45		-/-	46.0	0.0	187.2	0.0	0.283	0.784	115.3	-7.6	13.020	0.708	2.559	11.3	168.6	157.5	72.1	1.103
41990.0	42081.3	0.152	317.6	2.3	3.06	0.867	89.3	0.254	0.791	178.0	276.7	0.590D	0.992	-2.00	1.233	76.2	186.0	-8.0	0.298
42081.3	42122.0	0.298	228.7	-4.5	-1.35	1.017	102.8	0.334	0.572	208.8	293.5	0.381D	0.763A	3.99	1.647	74.9	306.9	9.6	0.663
4.13	17.53		-/-	42.6	0.0	188.5	0.0	0.285	0.784	116.9	-4.8	12.985	0.667	2.754	8.3	171.6	157.5	71.7	1.170
42000.0	42082.1	0.154	314.3	0.9	3.06	0.865	91.5	0.261	0.785	184.3	274.1	0.580D	0.990A	-1.46	1.229	75.7	188.4	-5.7	0.307
42082.1	42122.0	0.307	228.2	-4.4	-1.36	1.021	103.5	0.337	0.575	210.2	293.8	0.381D	0.768A	3.96	1.649	74.8	306.8	9.5	0.665
4.14	17.61		-/-	39.7	0.0	189.7	0.0	0.287	0.784	118.2	-1.9	13.020	0.628	2.947	5.7	174.2	157.5	71.5	1.223
42010.0	42082.9	0.166	309.4	-1.4	3.13	0.866	94.2	0.269	0.784	191.7	272.7	0.574D	0.995A	-0.91	1.228	75.2	190.3	-3.4	0.317
42082.9	42122.0	0.316	227.8	-4.3	-1.37	1.025	104.2	0.340	0.578	211.8	294.1	0.381D	0.774A	3.93	1.652	74.7	306.7	9.4	0.668
4.30	17.72		-/-	37.4	0.0	190.9	0.0	0.290	0.784	119.1	1.3	13.146	0.591	3.117	4.3	176.5	157.4	71.8	1.252
42020.0	42083.6	0.181	303.9	-4.4	3.28	0.874	97.7	0.278	0.791	201.0	273.1	0.571D	1.011A	-0.33	1.232	74.7	191.3	-1.2	0.327
42083.6	42122.0	0.327	227.3	-4.2	-1.37	1.031	104.9	0.344	0.581	213.5	294.5	0.381D	0.781A	3.90	1.655	74.7	306.6	9.3	0.671
4.62	17.90		-/-	36.1	0.0	192.2	0.0	0.292	0.784	119.5	4.8	13.423	0.553	3.227	5.6	178.5	157.3	72.7	1.233
42030.0	42084.5	0.195	299.1	-7.2	3.52	0.894	101.9	0.293	0.812	212.8	276.4	0.574D	1.050A	0.32	1.246	74.2	191.1	1.1	0.340
42084.5	42122.0	0.340	226.8	-4.0	-1.38	1.037	105.8	0.349	0.586	215.5	295.0	0.381D	0.790A	3.86	1.659	74.6	306.4	9.2	0.676
5.24	17.92		-/-	36.0	0.0	193.7	0.0	0.296	0.784	119.2	8.4	13.961	0.511	3.233	8.5	177.2	157.2	74.7	1.141
42040.0	42085.8	0.204	295.8	-8.6	3.58	0.935	107.0	0.321	0.863	228.5	283.9	0.586D	1.141A	1.07	1.275	73.9	189.2	3.6	0.360
42085.8	42122.0	0.360	226.2	-3.9	-1.39	1.049	107.0	0.356	0.593	218.4	295.9	0.382D	0.804A	3.81	1.666	74.5	306.1	9.0	0.682
6.47	18.03	451.0	-/-	37.8	2.4	195.7	0.0	0.301	0.784	116.5	11.7	14.659	0.458	3.294	11.7	172.5	157.0	79.4	0.957
								ARRIVAL DATE = 2442124.0											
41940.0	42078.9	0.179	305.0	6.6	4.37	0.895	83.3	0.226	0.842	155.6	299.7	0.652D	1.032	-5.77	1.263	80.0	170.8	-28.9	0.259
42078.9	42124.0	0.259	227.6	-6.9	-1.78	1.026	100.5	0.301	0.578	206.7	301.3	0.404D	0.752A	4.10	1.635	77.4	306.9	11.4	0.577
4.47	15.05	454.8	-/-	57.8	3.4	184.5	0.0	0.278	0.813	100.9	-21.4	12.631	0.884	2.188	30.6	148.3	151.5	84.0	0.946
41950.0	42079.2	0.170	310.5	4.6	4.14	0.889	84.1	0.231	0.831	159.4	294.2	0.639D	1.022	-4.63	1.257	79.1	174.0	-22.3	0.262
42079.2	42124.0	0.262	227.4	-6.8	-1.77	1.027	100.7	0.302	0.578	207.3	301.4	0.404D	0.753A	4.08	1.636	77.4	306.9	11.3	0.578
4.35	15.07	5.3	-/-	53.7	0.0	185.0	0.0	0.279	0.813	106.6	-16.8	12.688	0.863	2.217	23.7	155.2	151.5	78.9	1.049
41960.0	42079.8	0.163	314.7	3.9	3.66	0.883	85.1	0.235	0.820	163.4	289.5	0.627D	1.013	-3.82	1.251	78.4	177.4	-17.7	0.268
42079.8	42124.0	0.268	226.9	-6.7	-1.77	1.030	101.2	0.304	0.580	208.6	301.6	0.404D	0.757A	4.05	1.637	77.4	306.8	11.2	0.580
4.26	15.12		-/-	49.6	0.0	186.1	0.0	0.281	0.813	109.6	-12.9	12.485	0.823	2.386	18.8	160.3	151.5	76.8	1.141
41970.0	42080.5	0.157	317.3	3.7	3.37	0.878	86.2	0.240	0.810	167.8	285.2	0.616D	1.004	-3.15	1.245	77.7	180.6	-14.0	0.276
42080.5	42124.0	0.276	226.5	-6.5	-1.77	1.033	101.8	0.307	0.582	210.0	301.9	0.404D	0.761A	4.01	1.639	77.4	306.7	11.1	0.582
4.19	15.17		-/-	45.6	0.0	187.2	0.0	0.283	0.813	111.9	-9.6	12.363	0.779	2.578	14.7	164.5	151.4	75.5	1.230
41980.0	42081.3	0.152	318.3	3.5	3.13	0.873	87.6	0.245	0.801	172.7	281.3	0.605D	0.997	-2.56	1.239	77.1	183.7	-10.9	0.284
42081.3	42124.0	0.284	226.0	-6.3	-1.77	1.036	102.4	0.309	0.585	211.5	302.2	0.404D	0.766A	3.97	1.642	77.3	306.6	11.0	0.584
4.13	15.23		-/-	42.3	0.0	188.4	0.0	0.285	0.813	113.9	-6.4	12.302	0.735	2.790	11.3	168.1	151.4	74.6	1.316
41990.0	42082.0	0.150	317.1	2.8	3.10	0.869	89.4	0.250	0.793	178.2	278.0	0.596D	0.992	-2.00	1.234	76.5	186.5	-8.3	0.292
42082.0	42124.0	0.292	225.6	-6.1	-1.77	1.040	103.0	0.312	0.588	213.0	302.5	0.404D	0.771A	3.94	1.644	77.3	306.5	10.8	0.586
4.11	15.29		-/-	38.9	0.0	189.6	0.0	0.287	0.813	115.7	-3.1	12.297	0.693	3.010	8.3	171.2	151.3	74.0	1.393
42000.0	42082.7	0.152	313.8	1.2	3.09	0.867	91.6	0.257	0.788	184.5	275.5	0.586D	0.990A	-1.46	1.231	76.0	188.9	-5.8	0.301
42082.7	42124.0	0.301	225.2	-5.8	-1.77	1.044	103.6	0.315	0.591	214.5	302.9	0.404D	0.777A	3.90	1.647	77.3	306.3	10.7	0.588
4.14	15.36		-/-	36.1	0.0	190.8	0.0	0.290	0.813	117.0	0.3	12.356	0.653	3.226	6.2	173.9	151.2	73.7	1.454

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COIST1	SMA SMA COIST2	THETA1 THETA1 RAP	THETA2 THETA2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAMI	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
42010.0	42083.4	0.164	308.8	-1.2	3.15	0.869	94.3	0.264	0.787	192.1	274.1	0.579D	0.995A	-0.91	1.230	75.5	190.6	-3.5	0.310
42083.4	42124.0	0.310	224.8	-5.8	-1.77	1.049	104.2	0.319	0.594	216.2	303.3	0.405D	0.783A	3.87	1.649	77.2	306.2	10.6	0.590
4.27	15.43		-/-	34.1	0.0	191.9	0.0	0.292	0.813	118.0	3.9	12.505	0.615	3.407	6.3	176.3	151.1	74.0	1.480
42020.0	42084.2	0.189	303.3	-4.2	3.28	0.877	97.6	0.274	0.794	201.4	274.6	0.576D	1.011A	-0.33	1.234	75.0	191.6	-1.2	0.321
42084.2	42124.0	0.321	224.5	-5.6	-1.77	1.054	104.9	0.323	0.598	217.9	303.8	0.405D	0.791A	3.83	1.653	77.2	306.0	10.4	0.593
4.59	15.51		-/-	33.1	0.0	193.2	0.0	0.295	0.813	118.5	7.8	12.798	0.576	3.511	8.6	178.0	150.9	74.9	1.447
42030.0	42085.1	0.232	298.6	-7.2	3.52	0.897	101.8	0.289	0.815	213.4	277.9	0.580D	1.050A	0.32	1.248	74.6	191.3	1.1	0.333
42085.1	42124.0	0.333	224.1	-5.5	-1.78	1.060	105.7	0.328	0.603	220.0	304.4	0.405D	0.800A	3.78	1.657	77.2	305.7	10.3	0.597
5.23	15.60		-/-	33.4	0.0	194.6	0.0	0.298	0.813	119.1	11.5	13.344	0.533	3.482	11.8	176.5	150.8	76.8	1.322
42040.0	42086.3	0.301	295.4	-9.6	3.86	0.938	106.8	0.317	0.867	229.1	285.5	0.592D	1.142A	1.06	1.276	74.3	189.3	3.7	0.352
42086.3	42124.0	0.352	223.7	-5.2	-1.79	1.070	106.8	0.335	0.611	222.9	305.4	0.406D	0.816A	3.72	1.663	77.1	305.3	10.1	0.602
6.41	15.75		-/-	35.5	0.0	196.6	0.0	0.303	0.813	116.7	14.7	14.363	0.478	3.283	14.8	171.8	150.5	80.3	1.091
ARRIVAL DATE = 2442126.0																			
41940.0	42079.6	0.179	304.6	7.8	5.19	0.896	83.4	0.224	0.843	155.6	300.9	0.655D	1.032	-5.94	1.264	80.2	171.4	-30.2	0.257
42079.6	42126.0	0.257	224.8	-8.8	-2.18	1.043	100.8	0.286	0.590	210.5	309.6	0.422D	0.758A	4.10	1.632	79.5	305.9	12.9	0.514
4.47	13.19		-/-	54.1	0.0	185.8	0.0	0.280	0.843	100.5	-22.6	12.498	0.898	2.197	32.2	146.9	144.7	85.6	1.075
41950.0	42079.2	0.169	310.2	5.4	4.26	0.890	84.2	0.228	0.832	159.4	295.3	0.642D	1.022	-4.72	1.258	79.4	174.5	-23.1	0.259
42079.2	42126.0	0.259	224.6	-8.7	-2.18	1.044	101.0	0.286	0.591	210.9	309.6	0.422D	0.759A	4.09	1.633	79.5	305.8	12.9	0.514
4.34	13.21		-/-	50.1	0.0	186.1	0.0	0.281	0.843	105.1	-16.6	12.116	0.884	2.362	24.5	154.3	144.7	81.3	1.203
41960.0	42080.4	0.162	314.4	4.5	3.74	0.885	85.1	0.233	0.821	163.5	290.5	0.630D	1.013	-3.87	1.252	78.6	177.8	-18.2	0.265
42080.4	42126.0	0.265	224.3	-8.5	-2.18	1.047	101.4	0.288	0.592	212.1	309.9	0.422D	0.763A	4.05	1.634	79.4	305.7	12.7	0.515
4.25	13.24		-/-	46.2	0.0	187.0	0.0	0.282	0.843	108.4	-12.2	11.926	0.846	2.551	19.1	159.7	144.7	78.9	1.312
41970.0	42081.1	0.155	317.1	4.2	3.43	0.879	86.3	0.237	0.812	167.9	286.2	0.619D	1.004	-3.18	1.246	77.9	181.1	-14.4	0.272
42081.1	42126.0	0.272	223.9	-8.2	-2.17	1.050	101.9	0.290	0.595	213.6	310.2	0.422D	0.767A	4.01	1.636	79.4	305.6	12.6	0.517
4.17	13.29		-/-	42.4	0.0	188.2	0.0	0.284	0.843	110.9	-8.4	11.826	0.801	2.765	14.8	164.0	144.6	77.4	1.415
41980.0	42081.8	0.150	318.0	3.9	3.24	0.875	87.7	0.242	0.803	172.8	282.3	0.608D	0.997	-2.57	1.240	77.3	184.1	-11.2	0.280
42081.8	42126.0	0.280	223.5	-9.0	-2.17	1.054	102.5	0.293	0.597	215.1	310.6	0.422D	0.773A	3.97	1.639	79.4	305.4	12.4	0.519
4.12	13.33		-/-	39.0	0.0	189.3	0.0	0.287	0.843	113.1	-4.7	11.789	0.757	2.997	11.2	167.7	144.5	76.3	1.511
41990.0	42082.6	0.148	316.8	3.1	3.13	0.871	89.5	0.248	0.795	178.3	279.0	0.598D	0.992	-2.01	1.235	76.8	186.9	-8.4	0.288
42082.6	42126.0	0.288	223.2	-7.8	-2.16	1.057	103.0	0.296	0.600	216.7	311.0	0.423D	0.778A	3.92	1.641	79.4	305.2	12.2	0.520
4.09	13.39		-/-	36.0	0.0	190.5	0.0	0.289	0.843	114.9	-1.0	11.806	0.714	3.239	8.6	170.8	144.4	75.6	1.598
42000.0	42083.2	0.151	313.4	1.5	3.11	0.869	91.6	0.254	0.790	184.7	276.5	0.590D	0.991A	-1.46	1.232	76.2	189.2	-5.9	0.297
42083.2	42126.0	0.297	222.9	-7.5	-2.16	1.062	103.6	0.299	0.604	218.2	311.4	0.423D	0.784A	3.88	1.644	79.4	305.0	12.1	0.522
4.12	13.44		-/-	33.5	0.0	191.6	0.0	0.291	0.843	116.3	2.8	11.885	0.673	3.469	7.6	173.6	144.2	75.3	1.662
42010.0	42084.0	0.162	308.4	-1.0	3.16	0.871	94.3	0.261	0.789	192.3	275.2	0.583D	0.995A	-0.91	1.231	75.8	190.9	-3.6	0.306
42084.0	42126.0	0.305	222.6	-7.3	-2.16	1.066	104.2	0.303	0.607	219.8	311.9	0.423D	0.791A	3.84	1.647	79.4	304.8	11.9	0.524
4.25	13.50		-/-	31.8	0.0	192.8	0.0	0.294	0.843	117.4	6.9	12.051	0.634	3.654	8.9	176.0	144.1	75.5	1.684
42020.0	42084.7	0.187	302.9	-4.1	3.29	0.879	97.6	0.271	0.796	201.7	275.7	0.581D	1.012A	-0.33	1.236	75.3	191.8	-1.2	0.316
42084.7	42126.0	0.315	222.3	-7.1	-2.16	1.071	104.8	0.307	0.611	221.6	312.4	0.424D	0.799A	3.79	1.650	79.4	304.6	11.7	0.526
4.57	13.56		-/-	31.0	0.0	194.0	0.0	0.297	0.843	117.9	11.0	12.358	0.595	3.742	11.8	177.5	143.9	76.4	1.632
42030.0	42085.6	0.230	298.2	-7.1	3.51	0.899	101.8	0.285	0.818	213.8	279.1	0.584D	1.051A	0.31	1.249	74.9	191.5	1.2	0.328
42085.6	42126.0	0.328	222.1	-6.8	-2.16	1.078	105.5	0.312	0.617	223.7	313.1	0.424D	0.809A	3.73	1.654	79.4	304.3	11.5	0.529
5.20	13.65		-/-	31.6	0.0	195.4	0.0	0.300	0.843	117.5	14.9	12.910	0.551	3.677	15.2	175.9	143.6	78.3	1.474
42040.0	42086.8	0.298	295.1	-9.6	3.85	0.940	106.7	0.314	0.869	229.7	286.7	0.596D	1.142A	1.05	1.278	74.6	189.4	3.7	0.346
42086.8	42126.0	0.346	221.8	-6.5	-2.16	1.087	105.6	0.320	0.625	226.7	314.1	0.425D	0.825A	3.66	1.661	79.4	303.8	11.3	0.534
6.37	13.78		-/-	34.0	0.0	197.4	0.0	0.305	0.843	116.0	17.8	13.922	0.495	3.425	17.9	171.2	143.2	81.8	1.199
ARRIVAL DATE = 2442128.0																			
41940.0	42080.2	0.180	304.3	8.7	5.36	0.897	83.5	0.222	0.844	155.7	301.9	0.657D	1.031	-6.09	1.265	80.4	171.8	-31.2	0.255
42080.2	42128.0	0.255	222.8	-10.6	-2.59	1.056	101.0	0.273	0.600	213.5	317.2	0.436D	0.763A	4.14	1.630	81.2	304.0	14.6	0.460
4.47	11.65		-/-	51.4	0.0	186.7	0.0	0.282	0.872	99.0	-22.7	12.097	0.908	2.308	33.2	145.8	137.2	87.9	1.188
41950.0	42080.3	0.169	310.0	6.0	4.35	0.891	84.2	0.227	0.833	159.5	296.1	0.644D	1.022	-4.79	1.258	79.5	174.8	-23.7	0.257
42080.3	42128.0	0.257	222.7	-10.5	-2.59	1.057	101.1	0.273	0.600	213.7	317.3	0.436D	0.764A	4.13	1.630	81.2	304.0	14.6	0.461
4.33	11.66		-/-	47.4	0.0	186.9	0.0	0.282	0.872	104.2	-15.9	11.703	0.899	2.487	24.9	153.5	137.2	83.0	1.338
41960.0	42080.9	0.161	314.2	5.0	3.81	0.885	85.2	0.231	0.823	163.5	291.3	0.633D	1.012	-3.90	1.252	78.8	178.1	-18.6	0.262
42080.9	42128.0	0.262	222.5	-10.3	-2.58	1.059	101.5	0.275	0.602	214.9	317.6	0.436D	0.767A	4.09	1.632	81.2	303.8	14.4	0.462
4.24	11.68		-/-	43.6	0.0	187.8	0.0	0.284	0.872	107.7	-10.9	11.528	0.863	2.692	19.2	159.1	137.1	80.3	1.460
41970.0	42081.6	0.154	316.9	4.6	3.47	0.880	86.4	0.235	0.813	168.0	286.9	0.622D	1.004	-3.20	1.246	78.1	181.4	-14.6	0.269
42081.6	42128.0	0.269	222.1	-10.0	-2.57	1.062	102.0	0.278	0.604	216.3	317.9	0.437D	0.772A	4.04	1.634	81.2	303.6	14.2	0.463
4.16	11.72		-/-	40.1	0.0	188.9	0.0	0.286	0.872	110.4	-6.7	11.447	0.819	2.919	14.8	163.6	137.0	78.6	1.572
41980.0	42082.3	0.149	317.7	4.2	3.27	0.876	87.8	0.240	0.804	172.9	283.1	0.611D	0.997	-2.58	1.241	77.5	184.4	-11.4	0.277
42082.3	42128.0	0.277	221.8	-9.7	-2.56	1.066	102.5	0.281	0.607	217.9	318.3	0.437D	0.777A	3.99	1.636	81.2	303.4	14.0	0.464
4.10	11.76		-/-	36.8	0.0	190.0	0.0	0.288	0.872	112.7	-2.6	11.428	0.774	3.166	11.4	167.3	136.9	77.4	1.676
41990.0	42083.0	0.147	316.5	3.4	3.16	0.872	89.5	0.245	0.797	178.4	279.8	0.601D	0.992	-2.01	1.236	76.9	187.1	-8.5	0.285
42083.0	42128.0	0.285	221.6	-9.4	-2.55	1.070	103.0	0.284	0.610	219.4	318.8	0.437D	0.783A	3.94	1.639	81.2	303.2	13.8	0.466
4.08	11.81		-/-	34.0	0.0	191.2	0.0	0.290	0.872	114.6	1.4	11.462	0.731	3.419	9.5	170.6	136.7	76.6	1.767
42000.0	42083.7	0.150	313.1	1.7	3.13	0.871	91.6	0.251	0.792	184.9	277.3	0.593D	0.991A	-1.46	1.233	76.4	189.4	-6.0	0.293
42083.7	42128.0	0.293	221.3	-9.1	-2.54	1.074	103.5	0.287	0.613	221.0	319.2	0.437D	0.790A	3.89	1.642	81.2	303.0	13.6	0.467
4.11	11.85		-/-	31.8	0.0	192.3	0.0	0.293	0.872	116.1	5.6	11.558	0.690	3.654	9.7	173.4	136.5	76.3	1.831
42010.0	42084.4	0.161	308.0	-0.9	3.17	0.873	94.3	0.258	0.791	192.5	276.1	0.587D	0.996A	-0.91	1.233	76.0	191.1	-3.6	0.302
42084.4	42128.0	0.302	221.1	-8.8	-2.54	1.078	104.1	0.291	0.617	222.7	319.7	0.438D	0.796A	3.84	1.645	81.3	302.7	13.4	0.469
4.24	11.91		-/-	30.2	0.0	193.4	0.0	0.295	0.872	117.2	10.0	11.739	0.650	3.833	11.9	175.7	136.4	76.4	1.843

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
42020.0	42085.1	0.186	302.5	-4.0	3.29	0.881	97.6	0.268	0.798	202.0	276.7	0.584D	1.012A	-0.33	1.237	75.5	192.0	-1.3	0.311
42085.1	42128.0	0.311	220.9	-8.5	-2.53	1.083	104.6	0.295	0.621	224.4	320.3	0.438D	0.804A	3.78	1.648	81.3	302.4	13.2	0.471
4.55	11.96		-/-	29.7	0.0	194.6	0.0	0.298	0.872	117.7	14.3	12.057	0.611	3.900	15.2	177.1	136.1	77.4	1.771
42030.0	42086.0	0.229	297.9	-7.1	3.51	0.901	101.7	0.283	0.820	214.2	280.1	0.588D	1.051A	0.31	1.250	75.2	191.6	1.2	0.324
42086.0	42128.0	0.323	220.8	-8.2	-2.52	1.090	105.4	0.300	0.627	226.6	321.0	0.439D	0.815A	3.72	1.652	81.3	302.0	12.9	0.474
5.18	12.04		-/-	30.5	0.0	196.1	0.0	0.302	0.872	117.3	18.1	12.615	0.566	3.799	18.5	175.4	135.8	79.3	1.584
42040.0	42087.2	0.297	294.8	-9.6	3.83	0.941	106.6	0.311	0.872	230.1	287.8	0.600D	1.143A	1.04	1.279	74.9	189.4	3.8	0.341
42087.2	42128.0	0.341	220.6	-7.8	-2.52	1.099	106.4	0.308	0.635	229.5	322.0	0.439D	0.831A	3.63	1.659	81.3	301.4	12.6	0.478
6.33	12.16		-/-	33.2	0.0	198.0	0.0	0.307	0.872	115.7	20.7	13.621	0.509	3.505	20.8	170.6	135.3	82.8	1.276
42050.0	42089.1	0.396	293.3	-11.4	4.26	1.016	112.1	0.377	0.998	249.9	300.5	0.622D	1.373A	1.87	1.334	74.8	184.8	6.5	0.371
42089.1	42128.0	0.371	220.4	-7.2	-2.52	1.117	107.9	0.323	0.651	234.3	323.7	0.440D	0.862A	3.50	1.670	81.4	300.4	12.0	0.486
8.35	12.38	830.9	-/-	38.2	4.3	201.1	0.0	0.315	0.872	110.4	21.5	14.897	0.431	3.435	21.5	162.5	134.5	90.6	0.888
ARRIVAL DATE = 2442130.0																			
41940.0	42080.7	0.180	304.1	9.4	5.51	0.897	83.5	0.220	0.845	155.7	302.6	0.659D	1.031	-6.21	1.265	80.6	172.2	-32.1	0.254
42080.7	42130.0	0.254	221.6	-12.4	-3.00	1.065	101.1	0.264	0.607	215.6	324.2	0.447D	0.767A	4.22	1.629	82.8	301.3	16.6	0.418
4.47	10.42		-/-	49.3	0.0	187.5	0.0	0.283	0.902	98.2	-22.2	11.811	0.915	2.399	33.9	144.8	129.0	89.3	1.280
41950.0	42080.7	0.169	309.8	6.4	4.43	0.891	84.3	0.225	0.834	159.5	296.8	0.646D	1.021	-4.84	1.259	79.7	175.1	-24.2	0.255
42080.7	42130.0	0.255	221.6	-12.4	-3.00	1.066	101.1	0.264	0.607	215.7	324.2	0.447D	0.767A	4.22	1.629	82.8	301.2	16.5	0.418
4.33	10.42		-/-	45.5	0.0	187.5	0.0	0.283	0.902	103.8	-14.6	11.412	0.912	2.587	25.0	153.0	129.0	83.9	1.447
41960.0	42081.3	0.160	314.0	5.4	3.86	0.886	85.2	0.229	0.823	163.6	291.9	0.634D	1.012	-3.94	1.253	78.9	178.4	-18.9	0.260
42081.3	42130.0	0.260	221.4	-12.1	-2.99	1.068	101.4	0.266	0.609	216.8	324.5	0.447D	0.770A	4.17	1.630	82.8	301.1	16.3	0.418
4.23	10.44		-/-	41.9	0.0	188.4	0.0	0.285	0.902	107.5	-9.2	11.251	0.877	2.798	19.1	158.7	128.9	81.0	1.576
41970.0	42081.9	0.154	316.7	4.9	3.51	0.881	86.4	0.234	0.814	168.0	287.6	0.623D	1.004	-3.22	1.247	78.2	181.6	-14.9	0.267
42081.9	42130.0	0.267	221.1	-11.8	-2.97	1.071	101.9	0.268	0.611	218.3	324.9	0.447D	0.775A	4.12	1.633	82.8	300.9	15.1	0.420
4.15	10.47		-/-	38.5	0.0	189.4	0.0	0.287	0.902	110.3	-4.6	11.187	0.833	3.032	14.9	163.2	128.8	79.1	1.693
41980.0	42082.6	0.149	317.5	4.5	3.30	0.877	87.8	0.238	0.805	173.0	283.7	0.613D	0.997	-2.59	1.241	77.6	184.6	-11.5	0.274
42082.6	42130.0	0.274	220.9	-11.4	-2.95	1.075	102.4	0.271	0.614	219.8	325.3	0.447D	0.781A	4.05	1.635	82.8	300.6	15.8	0.421
4.10	10.51		-/-	35.5	0.0	190.6	0.0	0.289	0.902	112.7	-0.3	11.184	0.788	3.283	12.0	167.0	128.6	77.9	1.799
41990.0	42083.3	0.146	316.3	3.6	3.18	0.873	89.5	0.244	0.798	178.5	280.5	0.603D	0.992	-2.02	1.237	77.1	187.4	-8.7	0.282
42083.3	42130.0	0.282	220.6	-11.0	-2.94	1.078	102.9	0.275	0.617	221.4	325.7	0.448D	0.787A	3.99	1.637	82.8	300.4	15.5	0.422
4.07	10.55		-/-	32.9	0.0	191.7	0.0	0.291	0.902	114.7	4.1	11.233	0.745	3.535	11.1	170.3	128.4	77.1	1.888
42000.0	42084.0	0.149	312.8	1.8	3.14	0.872	91.7	0.249	0.793	185.0	278.1	0.595D	0.991A	-1.46	1.234	76.6	189.7	-6.1	0.290
42084.0	42130.0	0.290	220.5	-10.7	-2.92	1.082	103.4	0.278	0.620	223.0	326.2	0.448D	0.793A	3.93	1.640	82.8	300.1	15.3	0.424
4.10	10.60		-/-	30.8	0.0	192.9	0.0	0.294	0.902	116.3	8.6	11.343	0.704	3.764	12.3	173.1	128.2	76.7	1.946
42010.0	42084.7	0.160	307.7	-0.8	3.18	0.874	94.3	0.256	0.793	192.7	276.8	0.589D	0.996A	-0.91	1.234	76.1	191.3	-3.6	0.299
42084.7	42130.0	0.298	220.3	-10.3	-2.91	1.087	103.9	0.282	0.624	224.6	326.7	0.448D	0.800A	3.87	1.643	82.9	299.8	15.0	0.425
4.23	10.64		-/-	29.5	0.0	194.0	0.0	0.297	0.902	117.4	13.2	11.536	0.665	3.927	15.1	175.5	128.0	76.9	1.945
42020.0	42085.5	0.185	302.2	-4.0	3.30	0.883	97.6	0.266	0.800	202.3	277.5	0.587D	1.012A	-0.33	1.238	75.7	192.2	-1.3	0.308
42085.5	42130.0	0.308	220.2	-10.0	-2.90	1.092	104.5	0.286	0.628	226.4	327.2	0.448D	0.808A	3.81	1.646	82.9	299.4	14.7	0.427
4.54	10.70		-/-	29.2	0.0	195.2	0.0	0.299	0.902	117.9	17.5	11.864	0.625	3.970	18.5	176.7	127.7	77.9	1.855
42030.0	42086.3	0.228	297.6	-7.0	3.51	0.903	101.7	0.280	0.822	214.5	281.0	0.591D	1.052A	0.31	1.251	75.4	191.7	1.2	0.320
42086.3	42130.0	0.319	220.1	-9.6	-2.89	1.098	105.1	0.292	0.634	228.5	327.9	0.449D	0.818A	3.74	1.650	82.9	299.0	14.4	0.430
5.16	10.77		-/-	30.2	0.0	196.6	0.0	0.303	0.902	117.5	21.1	12.427	0.580	3.840	21.6	175.0	127.3	79.9	1.647
42040.0	42087.6	0.295	294.6	-9.6	3.82	0.943	106.5	0.309	0.873	230.5	288.8	0.604D	1.143A	1.03	1.280	75.1	189.5	3.8	0.337
42087.6	42130.0	0.337	220.0	-9.1	-2.87	1.107	105.1	0.300	0.642	231.5	328.9	0.450D	0.835A	3.64	1.657	83.0	298.3	13.9	0.434
6.30	10.80		-/-	33.0	0.0	198.6	0.0	0.308	0.902	115.8	23.3	13.427	0.523	3.520	23.5	170.1	126.8	83.4	1.317
42050.0	42089.4	0.394	293.1	-11.4	4.23	1.016	112.0	0.374	0.999	250.3	301.5	0.625D	1.373A	1.85	1.335	75.0	184.7	6.6	0.365
42089.4	42130.0	0.365	220.0	-8.4	-2.86	1.124	107.6	0.315	0.658	236.2	330.6	0.451D	0.865A	3.49	1.668	83.1	297.2	13.2	0.441
8.30	11.10	687.6	-/-	38.2	3.6	201.6	0.0	0.317	0.902	110.7	23.5	14.782	0.444	3.367	23.5	161.9	125.9	90.8	0.913
ARRIVAL DATE = 2442132.0																			
41940.0	42081.1	0.180	303.9	10.1	5.64	0.898	83.6	0.219	0.845	155.7	303.3	0.660D	1.031	-6.32	1.265	80.7	172.5	-32.8	0.254
42081.1	42132.0	0.254	221.2	-14.4	-3.43	1.071	101.0	0.257	0.611	217.0	330.4	0.454D	0.768A	4.34	1.629	84.1	297.7	18.6	0.385
4.49	9.49		-/-	47.8	0.0	189.1	0.0	0.284	0.931	97.9	-21.3	11.611	0.920	2.469	34.3	144.0	120.1	90.2	1.352
41950.0	42081.1	0.168	309.7	6.8	4.50	0.892	84.3	0.224	0.834	159.5	297.3	0.647D	1.021	-4.89	1.259	79.8	175.3	-24.6	0.253
42081.1	42132.0	0.253	221.2	-14.4	-3.43	1.071	101.0	0.257	0.611	216.9	330.4	0.454D	0.768A	4.35	1.629	84.1	297.7	18.6	0.385
4.33	9.49		-/-	44.2	0.0	188.1	0.0	0.284	0.931	104.0	-12.9	11.215	0.922	2.658	25.0	152.5	120.1	84.2	1.528
41960.0	42081.6	0.160	313.9	5.7	3.90	0.887	85.3	0.228	0.824	163.6	292.4	0.636D	1.012	-3.96	1.253	79.0	178.6	-19.2	0.258
42081.6	42132.0	0.258	221.0	-14.0	-3.41	1.073	101.3	0.259	0.613	218.0	330.7	0.454D	0.772A	4.29	1.630	84.1	297.6	18.3	0.386
4.23	9.51		-/-	40.9	0.0	188.9	0.0	0.286	0.931	107.8	-7.1	11.070	0.888	2.865	19.2	158.3	120.0	81.1	1.657
41970.0	42082.2	0.153	316.6	5.2	3.54	0.882	86.4	0.232	0.814	168.1	288.1	0.625D	1.004	-3.23	1.247	78.4	181.8	-15.1	0.265
42082.2	42132.0	0.265	220.8	-13.6	-3.39	1.076	101.8	0.262	0.615	219.4	331.0	0.454D	0.776A	4.23	1.632	84.1	297.3	18.0	0.387
4.15	9.54		-/-	37.7	0.0	189.9	0.0	0.288	0.931	110.8	-2.2	11.022	0.846	3.094	15.3	162.9	119.9	79.2	1.771
41980.0	42082.9	0.148	317.4	4.7	3.32	0.878	87.8	0.237	0.806	173.0	284.3	0.615D	0.997	-2.60	1.242	77.8	184.9	-11.7	0.272
42082.9	42132.0	0.272	220.6	-13.2	-3.36	1.080	102.2	0.265	0.618	221.0	331.4	0.454D	0.782A	4.15	1.634	84.1	297.0	17.7	0.388
4.09	9.57		-/-	34.9	0.0	191.1	0.0	0.290	0.931	113.2	2.4	11.033	0.801	3.338	13.3	166.8	119.7	77.9	1.873
41990.0	42083.6	0.145	316.1	3.9	3.20	0.874	89.6	0.242	0.799	178.6	281.1	0.605D	0.992	-2.02	1.238	77.2	187.6	-8.8	0.280
42083.6	42132.0	0.279	220.4	-12.7	-3.34	1.083	102.7	0.268	0.621	222.5	331.9	0.455D	0.788A	4.08	1.637	84.2	296.8	17.3	0.389
4.06	9.61		-/-	32.4	0.0	192.2	0.0	0.293	0.931	115.2	7.0	11.095	0.758	3.579	13.2	170.1	119.5	77.1	1.954
42000.0	42084.3	0.148	312.6	2.0	3.15	0.873	91.7	0.248	0.794	185.1	278.7	0.598D	0.991A	-1.47	1.235	76.7	189.8	-6.1	0.287
42084.3	42132.0	0.287	220.2	-12.3	-3.31	1.087	103.2	0.272	0.625	224.1	332.3	0.455D	0.794A	4.01	1.639	84.2	296.4	17.0	0.391
4.09	9.65		-/-	30.6	0.0	193.4	0.0	0.295	0.931	116.9	11.6	11.217	0.717	3.791	15.1	172.9	119.2	76.8	2.001

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COIST1	SMA SMA COIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
42010.0	42085.0	0.159	307.5	-0.7	3.19	0.875	94.3	0.254	0.794	192.9	277.5	0.592D	0.996A	-0.91	1.234	76.3	191.5	-3.7	0.296
42085.0	42132.0	0.296	220.1	-11.9	-3.79	1.091	133.7	0.275	0.628	225.8	332.8	0.455D	0.801A	3.94	1.642	84.2	296.1	16.6	0.392
4.22	9.70		-/-	29.5	0.0	194.5	0.0	0.298	0.931	118.0	16.2	11.421	0.678	3.932	18.2	175.3	119.0	77.0	1.987
42020.0	42085.8	0.184	301.9	-3.9	3.30	0.884	97.6	0.263	0.801	202.5	278.2	0.590D	1.012A	-0.32	1.239	75.9	192.3	-1.3	0.305
42085.8	42132.0	0.305	220.0	-11.5	-3.27	1.095	134.3	0.280	0.632	227.5	333.4	0.456D	0.809A	3.87	1.645	84.3	295.7	16.3	0.394
4.52	9.75		-/-	29.3	0.0	195.7	0.0	0.301	0.931	118.5	20.4	11.756	0.638	3.952	21.6	176.4	118.7	78.1	1.882
42030.0	42086.7	0.227	297.4	-7.0	3.50	0.904	101.6	0.278	0.823	214.8	281.8	0.594D	1.052A	0.31	1.252	75.6	191.8	1.2	0.316
42086.7	42132.0	0.316	219.9	-11.0	-3.75	1.102	134.9	0.285	0.638	229.6	334.0	0.456D	0.819A	3.79	1.649	84.3	295.3	15.9	0.397
5.14	9.83		-/-	30.5	0.0	197.2	0.0	0.304	0.931	118.0	23.8	12.322	0.593	3.804	24.4	174.6	118.3	80.1	1.662
42040.0	42087.9	0.293	294.4	-9.6	3.81	0.944	106.4	0.307	0.875	230.8	289.6	0.607D	1.144A	1.03	1.281	75.3	189.5	3.8	0.333
42087.9	42132.0	0.332	219.9	-10.4	-3.22	1.111	105.8	0.293	0.646	232.5	335.0	0.456D	0.836A	3.67	1.655	84.4	294.6	15.3	0.401
6.28	9.94		-/-	33.4	0.0	199.1	0.0	0.310	0.931	116.2	25.5	13.316	0.536	3.477	25.8	169.7	117.8	83.6	1.327
42050.0	42089.8	0.391	292.9	-11.4	4.21	1.017	111.8	0.372	1.000	250.6	302.4	0.628D	1.373A	1.84	1.335	75.3	184.7	6.6	0.361
42089.8	42132.0	0.360	220.0	-9.6	-3.19	1.127	137.3	0.309	0.662	237.2	336.6	0.457D	0.866A	3.50	1.666	84.5	293.4	14.4	0.408
8.25	10.15	650.3	-/-	38.7	3.5	202.2	0.0	0.318	0.931	111.1	25.2	14.675	0.456	3.304	25.2	161.3	116.8	91.0	0.919

ARRIVAL DATE = 2442134.0

41940.0	42081.4	0.181	303.6	10.7	5.76	0.898	83.6	0.218	0.846	155.7	303.9	0.662D	1.031	-6.42	1.266	80.8	172.8	-33.5	0.253
42081.4	42134.0	0.253	221.4	-16.4	-3.89	1.074	100.9	0.253	0.614	217.5	335.9	0.458D	0.769A	4.51	1.630	85.2	293.6	20.6	0.363
4.48	8.86		-/-	46.8	0.0	188.7	0.0	0.285	0.960	98.3	-19.8	11.479	0.924	2.518	34.6	143.3	110.8	90.4	1.402
41950.0	42081.3	0.168	309.6	7.2	4.56	0.892	84.4	0.223	0.835	159.5	297.8	0.649D	1.021	-4.94	1.259	79.9	175.5	-25.0	0.252
42081.3	42134.0	0.252	221.4	-16.5	-3.99	1.074	100.8	0.252	0.613	217.3	335.3	0.458D	0.768A	4.52	1.629	85.2	293.6	20.7	0.363
4.32	8.86		-/-	43.6	0.0	188.5	0.0	0.285	0.960	104.7	-10.8	11.095	0.930	2.695	25.1	152.0	110.8	83.9	1.577
41960.0	42081.8	0.160	313.8	5.9	3.94	0.887	85.3	0.227	0.825	163.6	292.9	0.637D	1.012	-3.99	1.253	79.1	178.8	-19.5	0.257
42081.8	42134.0	0.257	221.3	-16.1	-3.97	1.075	101.1	0.254	0.615	218.3	336.1	0.459D	0.771A	4.46	1.631	85.2	293.4	20.4	0.363
4.22	8.87		-/-	40.5	0.0	189.3	0.0	0.287	0.960	108.6	-4.6	10.970	0.899	2.890	19.6	158.0	110.7	80.7	1.698
41970.0	42082.5	0.153	316.4	5.4	3.67	0.882	86.5	0.231	0.815	168.1	288.6	0.627D	1.004	-3.25	1.248	78.5	182.0	-15.3	0.263
42082.5	42134.0	0.263	221.1	-15.6	-3.83	1.079	101.6	0.257	0.617	219.8	336.4	0.459D	0.776A	4.38	1.633	85.2	293.2	19.9	0.364
4.14	8.90		-/-	37.6	0.0	190.4	0.0	0.289	0.960	111.7	0.5	10.937	0.857	3.105	16.3	162.6	110.6	78.7	1.803
41980.0	42083.2	0.147	317.2	4.9	3.34	0.878	87.9	0.236	0.807	173.1	284.8	0.617D	0.997	-2.61	1.242	77.9	185.0	-11.8	0.270
42083.2	42134.0	0.270	220.9	-15.0	-3.79	1.082	102.0	0.260	0.620	221.3	336.8	0.459D	0.781A	4.30	1.635	85.3	292.9	19.5	0.365
4.08	8.93		-/-	34.9	0.0	191.5	0.0	0.291	0.960	114.1	5.2	10.961	0.813	3.330	15.0	166.5	110.4	77.4	1.894
41990.0	42083.9	0.145	315.9	3.9	3.21	0.875	89.6	0.240	0.800	178.7	281.6	0.607D	0.992	-2.03	1.238	77.3	187.8	-8.9	0.277
42083.9	42134.0	0.277	220.7	-14.5	-3.76	1.086	102.5	0.263	0.623	222.9	337.3	0.459D	0.787A	4.21	1.637	85.3	292.6	19.1	0.367
4.05	8.97		-/-	32.7	0.0	192.7	0.0	0.294	0.960	116.2	9.9	11.034	0.770	3.551	15.7	169.9	110.1	76.7	1.964
42000.0	42084.6	0.147	312.3	2.1	3.17	0.874	91.7	0.246	0.795	185.3	279.3	0.600D	0.991A	-1.47	1.235	76.9	190.0	-6.2	0.285
42084.6	42134.0	0.285	220.6	-14.0	-3.72	1.089	103.0	0.267	0.626	224.5	337.7	0.459D	0.793A	4.13	1.640	85.4	292.3	18.6	0.368
4.08	9.01		-/-	31.0	0.0	193.8	0.0	0.296	0.960	117.8	14.5	11.165	0.729	3.739	18.0	172.7	109.9	76.5	1.997
42010.0	42085.3	0.158	307.2	-0.6	3.19	0.876	94.3	0.253	0.795	193.1	278.2	0.594D	0.996A	-0.91	1.235	76.4	191.7	-3.7	0.293
42085.3	42134.0	0.293	220.5	-13.5	-3.63	1.093	103.5	0.270	0.630	226.1	338.2	0.460D	0.800A	4.05	1.643	85.4	292.0	18.2	0.370
4.21	9.06		-/-	30.1	0.0	195.0	0.0	0.299	0.960	119.0	19.0	11.377	0.690	3.856	21.1	175.0	109.6	76.8	1.971
42020.0	42086.1	0.183	301.7	-3.8	3.30	0.885	97.6	0.262	0.803	202.7	278.9	0.593D	1.013A	-0.32	1.240	76.1	192.4	-1.3	0.302
42086.1	42134.0	0.302	220.4	-13.0	-3.66	1.098	104.0	0.275	0.634	227.8	338.7	0.460D	0.808A	3.96	1.646	85.5	291.6	17.8	0.372
4.51	9.11		-/-	30.1	0.0	196.2	0.0	0.302	0.960	119.4	23.0	11.718	0.651	3.857	24.3	176.0	109.3	77.9	1.858
42030.0	42087.0	0.226	297.1	-7.0	3.50	0.905	101.6	0.276	0.825	215.1	282.6	0.597D	1.053A	0.31	1.253	75.7	191.9	1.2	0.313
42087.0	42134.0	0.313	220.3	-12.5	-3.63	1.104	104.7	0.280	0.639	229.9	339.3	0.460D	0.818A	3.87	1.650	85.5	291.1	17.2	0.374
5.12	9.18		-/-	31.3	0.0	197.7	0.0	0.306	0.960	118.8	26.0	12.285	0.606	3.703	26.8	174.2	109.0	80.0	1.637
42040.0	42088.2	0.292	294.2	-9.6	3.80	0.945	106.4	0.305	0.877	231.1	290.5	0.610D	1.144A	1.02	1.282	75.5	189.6	3.9	0.329
42088.2	42134.0	0.329	220.3	-11.8	-3.59	1.113	105.6	0.288	0.647	232.8	340.2	0.461D	0.834A	3.73	1.655	85.6	290.5	16.5	0.378
6.25	9.30		-/-	34.4	0.0	199.6	0.0	0.311	0.960	116.9	27.3	13.273	0.548	3.386	27.7	169.2	108.4	83.5	1.308
42050.0	42090.1	0.389	292.7	-11.5	4.19	1.018	111.7	0.370	1.002	251.0	303.2	0.631D	1.372A	1.83	1.336	75.6	184.7	6.7	0.356
42090.1	42134.0	0.356	220.5	-10.9	-3.53	1.128	107.0	0.304	0.662	237.4	341.7	0.461D	0.863A	3.54	1.666	85.8	289.3	15.4	0.386
8.20	9.51	700.5	-/-	39.7	3.9	202.7	0.0	0.320	0.960	111.4	26.5	14.573	0.468	3.244	26.6	160.8	107.4	91.2	0.910

ARRIVAL DATE = 2442136.0

41940.0	42081.7	0.181	303.5	11.2	5.87	0.899	83.6	0.217	0.847	155.7	304.4	0.663D	1.030	-6.51	1.266	80.9	173.0	-34.1	0.253
42081.7	42136.0	0.253	222.3	-18.6	-4.38	1.075	100.7	0.250	0.614	217.3	340.6	0.461D	0.767A	4.73	1.632	86.2	289.1	22.6	0.350
4.49	8.51		-/-	46.3	0.0	189.2	0.0	0.286	0.988	99.3	-17.9	11.404	0.927	2.544	34.7	142.7	101.4	89.9	1.432
41950.0	42081.6	0.168	309.4	7.5	4.60	0.893	84.4	0.222	0.835	159.5	298.2	0.650D	1.021	-4.97	1.260	79.9	175.7	-25.3	0.251
42081.6	42136.0	0.251	222.3	-18.8	-4.40	1.074	100.6	0.249	0.613	216.9	340.6	0.461D	0.766A	4.76	1.632	86.2	289.2	22.7	0.350
4.32	8.50		-/-	43.5	0.0	188.9	0.0	0.286	0.988	106.0	-8.2	11.045	0.938	2.699	25.3	151.7	101.4	83.0	1.593
41960.0	42082.1	0.159	313.7	6.2	3.97	0.888	85.3	0.226	0.825	163.7	293.3	0.638D	1.012	-4.01	1.254	79.2	179.0	-19.7	0.255
42082.1	42136.0	0.255	222.2	-18.3	-4.36	1.076	100.9	0.251	0.615	217.9	340.8	0.461D	0.769A	4.69	1.633	86.2	289.0	22.3	0.351
4.22	8.52		-/-	40.8	0.0	189.7	0.0	0.287	0.988	110.0	-1.8	10.943	0.908	2.871	20.4	157.7	101.3	79.7	1.699
41970.0	42082.7	0.152	316.2	5.6	3.60	0.883	86.5	0.230	0.816	168.2	289.0	0.628D	1.004	-3.26	1.248	78.6	182.2	-15.4	0.261
42082.7	42136.0	0.261	221.9	-17.7	-4.31	1.079	101.3	0.254	0.617	219.4	341.1	0.461D	0.774A	4.59	1.635	86.2	288.8	21.8	0.352
4.14	8.54		-/-	38.1	0.0	190.8	0.0	0.289	0.988	113.0	3.3	10.925	0.867	3.064	17.9	162.4	101.1	77.8	1.789
41980.0	42083.5	0.147	317.1	5.1	3.36	0.879	87.9	0.234	0.807	173.1	285.3	0.618D	0.997	-2.62	1.243	78.0	185.2	-11.9	0.268
42083.5	42136.0	0.268	221.7	-17.0	-4.25	1.082	101.8	0.257	0.620	220.9	341.5	0.461D	0.779A	4.49	1.637	86.3	288.5	21.3	0.353
4.07	8.57		-/-	35.7	0.0	191.9	0.0	0.292	0.988	115.5	8.1	10.960	0.824	3.265	17.3	166.3	100.9	76.6	1.865
41990.0	42084.2	0.144	315.7	4.1	3.23	0.876	89.6	0.239	0.800	178.8	282.2	0.609D	0.992	-2.03	1.239	77.5	187.9	-8.9	0.275
42084.2	42136.0	0.275	221.6	-16.4	-4.20	1.085	102.3	0.260	0.623	222.5	341.9	0.461D	0.785A	4.39	1.640	86.3	288.3	20.7	0.354
4.04	8.61		-/-	33.6	0.0	193.1	0.0	0.295	0.988	117.5	12.7	11.041	0.782	3.459	18.5	169.7	100.7	76.0	1.922

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVS	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COIST1	SMA SMA COIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
42000.0	42084.3	0.146	312.1	2.3	3.19	0.875	91.7	0.244	0.796	185.4	279.9	0.602D	0.991A	-1.47	1.236	77.0	190.2	-6.3	0.283
42084.9	42136.0	0.283	221.4	-15.8	-4.14	1.089	102.7	0.263	0.626	224.1	342.4	0.461D	0.791A	4.29	1.642	86.4	288.0	20.2	0.355
4.07	8.64		-/-	32.1	0.0	194.3	0.0	0.297	0.988	119.1	17.2	11.179	0.741	3.620	20.9	172.5	100.5	75.8	1.942
42010.0	42085.6	0.158	306.9	-0.5	3.20	0.877	94.3	0.251	0.796	193.2	278.8	0.597D	0.996A	-0.91	1.236	76.6	191.8	-3.8	0.290
42085.6	42136.0	0.290	221.3	-15.2	-4.11	1.093	103.2	0.267	0.629	225.7	342.8	0.461D	0.798A	4.19	1.645	86.4	287.6	19.7	0.357
4.20	8.69		-/-	31.2	0.0	195.5	0.0	0.300	0.988	120.2	21.5	11.396	0.703	3.714	23.8	174.8	100.2	76.3	1.907
42020.0	42086.4	0.182	301.4	-3.8	3.31	0.886	97.6	0.260	0.804	202.9	279.6	0.595D	1.013A	-0.32	1.241	76.2	192.6	-1.3	0.299
42084.4	42136.0	0.299	221.3	-14.7	-4.07	1.097	103.7	0.271	0.633	227.4	343.3	0.462D	0.805A	4.10	1.648	86.5	287.3	19.1	0.359
4.50	8.74		-/-	31.3	0.0	196.7	0.0	0.303	0.988	120.6	25.2	11.740	0.663	3.702	26.7	175.7	99.9	77.5	1.793
42030.0	42087.3	0.225	296.9	-7.0	3.50	0.906	101.6	0.274	0.826	215.4	283.4	0.600D	1.053A	0.31	1.254	75.9	192.0	1.2	0.309
42087.3	42136.0	0.309	221.2	-14.0	-4.02	1.103	104.4	0.276	0.638	229.5	343.9	0.462D	0.815A	3.98	1.651	86.5	286.9	18.5	0.361
5.11	8.81		-/-	32.7	0.0	198.2	0.0	0.307	0.988	119.9	27.9	12.305	0.619	3.553	28.8	173.7	99.6	79.6	1.580
42040.0	42088.5	0.291	294.0	-9.5	3.79	0.946	106.3	0.303	0.879	231.5	291.4	0.612D	1.145A	1.02	1.282	75.7	189.6	3.9	0.325
42088.5	42136.0	0.325	221.2	-13.2	-3.96	1.111	105.3	0.285	0.646	232.3	344.7	0.462D	0.830A	3.83	1.657	86.6	286.3	17.6	0.365
6.23	8.93		-/-	35.9	0.0	200.2	0.0	0.313	0.988	117.9	28.8	13.286	0.561	3.257	29.3	168.7	99.0	83.2	1.267
42050.0	42090.4	0.337	292.6	-11.5	4.17	1.018	111.6	0.368	1.003	251.3	304.1	0.634D	1.372A	1.81	1.336	75.8	184.6	6.7	0.351
42090.4	42136.0	0.351	221.4	-12.0	-3.88	1.126	106.7	0.299	0.660	236.9	346.2	0.463D	0.858A	3.60	1.667	86.8	285.2	16.3	0.373
8.16	9.15	824.4	-/-	41.1	4.5	203.3	0.0	0.322	0.988	111.8	27.6	14.472	0.480	3.186	27.7	160.2	98.1	91.3	0.888

ARRIVAL DATE = 2442138.0

41940.0	42082.0	0.181	303.3	11.6	5.96	0.899	83.7	0.217	0.847	155.7	304.8	0.664D	1.030	-6.59	1.266	81.0	173.2	-34.6	0.252
42082.0	42138.0	0.252	223.8	-21.1	-4.94	1.073	100.4	0.248	0.613	216.3	344.8	0.461D	0.764A	5.04	1.637	87.0	284.8	24.4	0.347
4.49	8.41		-/-	46.7	0.0	189.6	0.0	0.287	1.017	100.9	-15.4	11.380	0.929	2.550	34.8	142.1	92.3	88.7	1.440
41950.0	42081.7	0.168	309.4	7.7	4.64	0.893	84.4	0.222	0.836	159.5	298.5	0.650D	1.021	-5.00	1.260	80.0	175.8	-25.6	0.251
42081.7	42138.0	0.251	223.9	-21.4	-4.97	1.072	100.2	0.247	0.612	215.8	344.7	0.461D	0.763A	5.08	1.636	87.0	284.9	24.7	0.347
4.32	8.41		-/-	44.0	0.0	189.2	0.0	0.286	1.017	107.8	-5.1	11.067	0.943	2.669	26.0	151.4	92.3	81.4	1.574
41960.0	42082.2	0.159	313.6	6.4	4.30	0.888	85.4	0.226	0.826	163.7	293.6	0.639D	1.012	-4.03	1.254	79.3	179.1	-19.9	0.254
42082.2	42138.0	0.254	223.7	-20.8	-4.92	1.074	100.5	0.249	0.613	216.8	344.9	0.461D	0.766A	4.99	1.637	87.0	284.7	24.2	0.347
4.21	8.42		-/-	41.7	0.0	190.0	0.0	0.288	1.017	111.8	1.3	10.992	0.915	2.811	21.9	157.4	92.2	78.2	1.657
41970.0	42082.9	0.152	316.2	5.8	3.62	0.883	86.5	0.229	0.816	169.2	289.4	0.629D	1.004	-3.27	1.248	78.6	182.3	-15.6	0.260
42082.9	42139.0	0.260	223.4	-20.1	-4.84	1.077	101.0	0.251	0.616	218.2	345.2	0.461D	0.770A	4.87	1.639	87.0	284.5	23.6	0.348
4.13	8.44		-/-	39.3	0.0	191.1	0.0	0.290	1.017	114.8	6.4	10.988	0.876	2.976	20.1	162.2	92.0	76.4	1.730
41980.0	42083.7	0.146	317.0	5.3	3.38	0.879	87.9	0.233	0.808	173.2	285.7	0.619D	0.997	-2.62	1.243	78.1	185.4	-12.1	0.267
42083.7	42138.0	0.266	223.2	-19.3	-4.77	1.080	101.4	0.254	0.618	219.8	345.6	0.461D	0.775A	4.75	1.641	87.1	284.3	22.9	0.349
4.07	8.46		-/-	37.0	0.0	192.3	0.0	0.293	1.017	117.2	11.0	11.031	0.834	3.148	20.0	166.1	91.8	75.4	1.791
41990.0	42084.4	0.143	315.5	4.3	3.25	0.877	89.7	0.238	0.801	178.9	282.6	0.611D	0.992	-2.03	1.239	77.6	188.1	-9.0	0.273
42084.4	42139.0	0.273	223.0	-18.5	-4.70	1.083	101.9	0.258	0.621	221.4	346.0	0.461D	0.781A	4.62	1.643	87.1	284.1	22.2	0.350
4.04	8.49		-/-	35.1	0.0	193.5	0.0	0.296	1.017	119.2	15.4	11.117	0.793	3.314	21.4	169.5	91.6	74.9	1.834
42000.0	42085.2	0.146	311.9	2.4	3.19	0.876	91.8	0.243	0.797	185.5	280.4	0.603D	0.991A	-1.47	1.236	77.1	190.3	-6.3	0.280
42085.2	42138.0	0.280	222.8	-17.8	-4.63	1.087	102.4	0.261	0.624	223.0	346.4	0.461D	0.787A	4.50	1.646	87.2	283.8	21.6	0.351
4.06	8.53		-/-	33.7	0.0	194.7	0.0	0.298	1.017	120.8	19.7	11.258	0.753	3.448	23.7	172.3	91.4	74.9	1.844
42010.0	42085.9	0.157	306.7	-0.4	3.21	0.878	94.4	0.249	0.797	193.4	279.4	0.599D	0.996A	-0.91	1.237	76.7	192.0	-3.8	0.288
42085.9	42138.0	0.288	222.7	-17.1	-4.57	1.090	102.9	0.254	0.627	224.6	346.8	0.461D	0.793A	4.39	1.648	87.3	283.5	21.0	0.352
4.10	8.57		-/-	33.0	0.0	195.9	0.0	0.301	1.017	121.8	23.7	11.476	0.715	3.524	26.3	174.5	91.1	75.5	1.805
42020.0	42086.7	0.181	301.2	-3.7	3.31	0.887	97.6	0.258	0.805	203.1	280.3	0.598D	1.013A	-0.32	1.242	76.4	192.7	-1.3	0.296
42086.7	42138.0	0.296	222.7	-16.4	-4.51	1.095	103.4	0.268	0.631	226.3	347.3	0.462D	0.800A	4.28	1.651	87.3	283.2	20.3	0.354
4.49	8.62		-/-	33.1	0.0	197.2	0.0	0.304	1.017	122.1	27.1	11.819	0.676	3.506	28.9	175.3	90.8	76.7	1.695
42030.0	42087.6	0.224	296.6	-6.9	3.49	0.908	101.5	0.272	0.828	215.6	284.2	0.603D	1.053A	0.31	1.255	76.1	192.1	1.2	0.306
42087.6	42138.0	0.306	222.6	-15.7	-4.44	1.100	104.0	0.274	0.636	228.4	347.8	0.462D	0.810A	4.14	1.655	87.4	282.9	19.5	0.357
5.00	8.69		-/-	34.5	0.0	198.7	0.0	0.308	1.017	121.3	29.4	12.381	0.632	3.369	30.5	173.3	90.5	79.0	1.498
42040.0	42088.9	0.289	293.8	-9.5	3.78	0.947	106.2	0.301	0.880	231.8	292.2	0.615D	1.145A	1.01	1.283	76.0	189.6	3.9	0.321
42088.9	42139.0	0.321	222.6	-14.7	-4.36	1.108	104.9	0.282	0.643	231.2	348.6	0.462D	0.824A	3.96	1.660	87.5	282.3	18.5	0.361
6.20	8.80		-/-	37.6	0.0	200.7	0.0	0.314	1.017	119.1	30.0	13.353	0.575	3.103	30.6	168.3	90.0	82.7	1.209

ARRIVAL DATE = 2442140.0

41940.0	42082.1	0.182	303.2	11.9	6.00	0.899	83.7	0.216	0.847	155.7	305.0	0.664D	1.030	-6.63	1.266	81.0	173.3	-34.9	0.252
42082.1	42140.0	0.252	225.9	-24.1	-5.61	1.069	100.0	0.247	0.609	214.5	348.4	0.459D	0.760A	5.46	1.643	87.7	281.0	26.4	0.352
4.50	8.55		-/-	46.5	0.0	189.8	0.0	0.287	1.044	103.4	-12.0	11.410	0.930	2.533	34.9	141.8	83.7	86.5	1.426
41950.0	42081.8	0.168	309.3	7.8	4.66	0.893	84.4	0.222	0.836	159.5	298.6	0.651D	1.021	-5.01	1.260	80.0	175.9	-25.6	0.250
42081.8	42140.0	0.250	226.1	-24.5	-5.66	1.068	99.8	0.246	0.609	213.9	348.3	0.459D	0.758A	5.53	1.642	87.7	281.0	25.7	0.352
4.32	8.55		-/-	45.2	0.0	189.3	0.0	0.286	1.044	110.4	-1.4	11.178	0.945	2.603	27.4	151.3	83.8	78.9	1.515
41960.0	42082.3	0.159	313.6	6.5	4.02	0.888	85.4	0.225	0.826	163.7	293.8	0.640D	1.012	-4.04	1.254	79.3	179.2	-20.0	0.254
42082.3	42140.0	0.254	225.8	-23.8	-5.58	1.070	100.1	0.248	0.610	214.9	348.5	0.459D	0.761A	5.41	1.643	87.7	280.9	26.1	0.352
4.21	8.55		-/-	43.3	0.0	190.1	0.0	0.288	1.044	114.3	4.8	11.134	0.919	2.712	24.2	157.3	83.7	75.9	1.573
41970.0	42083.1	0.151	316.1	6.0	3.64	0.884	86.6	0.229	0.817	168.2	289.7	0.630D	1.003	-3.28	1.249	78.7	182.4	-15.7	0.259
42083.1	42140.0	0.259	225.5	-22.8	-5.47	1.072	100.5	0.250	0.612	216.4	348.8	0.459D	0.765A	5.25	1.645	87.8	280.8	25.3	0.352
4.13	8.56		-/-	41.1	0.0	191.3	0.0	0.291	1.044	117.1	9.6	11.140	0.882	2.847	22.9	162.0	83.5	74.4	1.629
41980.0	42083.9	0.146	316.8	5.4	3.40	0.880	88.0	0.233	0.808	173.2	286.1	0.620D	0.997	-2.63	1.244	78.1	185.5	-12.1	0.265
42083.9	42140.0	0.265	225.2	-21.8	-5.36	1.076	101.0	0.253	0.615	218.1	349.1	0.459D	0.770A	5.09	1.647	87.8	280.6	24.5	0.353
4.06	8.57		-/-	39.1	0.0	192.6	0.0	0.293	1.044	119.5	14.0	11.184	0.842	2.991	23.1	165.9	83.3	73.7	1.676
41990.0	42084.7	0.143	315.4	4.4	3.26	0.877	89.7	0.237	0.802	178.9	283.1	0.612D	0.992	-2.04	1.240	77.6	188.2	-9.1	0.272
42084.7	42140.0	0.272	225.0	-20.9	-5.26	1.079	101.5	0.256	0.617	219.7	349.5	0.459D	0.776A	4.94	1.649	87.9	280.4	23.7	0.353
4.03	8.59		-/-	37.3	0.0	193.9	0.0	0.296	1.044	121.4	18.1	11.270	0.802	3.129	24.4	169.3	83.1	73.4	1.708

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL I 1 V 1 PSI 1 ECCEN	SMA THET1 THET2 PERIH APHEL I 2 V 2 PSI 2 R A DECL SPEED
		LEG	KAPPA DELK RAS DECLS EDIST1	EDIST2 RAP DECLP VP -A E INCL LAM1 LAM2 ETA PERIC
42000.0	42085.4	0.145	311.7 2.5 3.20 0.877 91.8 0.242	0.798 185.6 280.9 0.605D 0.991A -1.47 1.237 77.2 190.5 -6.4 0.278
42085.4	42140.0	0.278	224.8 -20.0 -5.17 1.082 102.0 0.259	0.620 221.3 349.9 0.459D 0.781A 4.79 1.651 87.9 280.2 22.9 0.354
4.06	8.62		-/- 35.9 0.0 195.1 0.0 0.299	1.044 122.8 22.0 11.468 0.764 3.241 26.4 172.1 82.9 73.6 1.712
42010.0	42086.2	0.156	306.4 -0.3 3.22 0.879 94.4 0.248	0.799 193.5 280.0 0.601D 0.996A -0.91 1.237 76.8 192.1 -3.8 0.285
42086.2	42140.0	0.285	224.6 -19.2 -5.09 1.085 102.5 0.263	0.623 222.9 350.3 0.460D 0.787A 4.65 1.654 88.0 280.0 22.1 0.356
4.18	8.66		-/- 35.3 0.0 196.4 0.0 0.302	1.044 123.8 25.7 11.622 0.727 3.301 28.7 174.3 82.6 74.4 1.673
42020.0	42087.0	0.180	300.9 -3.7 3.31 0.889 97.6 0.256	0.807 203.3 281.0 0.600D 1.013A -0.32 1.242 76.5 192.8 -1.3 0.293
42087.0	42140.0	0.293	224.5 -18.4 -5.00 1.090 103.0 0.267	0.627 224.6 350.7 0.460D 0.794A 4.51 1.657 88.0 279.7 21.4 0.357
4.48	8.71		-/- 35.5 0.0 197.6 0.0 0.306	1.044 123.9 28.7 11.960 0.689 3.283 30.8 175.0 82.4 75.8 1.573
42030.0	42087.9	0.223	296.4 -6.9 3.49 0.909 101.5 0.270	0.829 215.9 284.9 0.605D 1.054A 0.31 1.256 76.3 192.2 1.2 0.303
42087.9	42140.0	0.303	224.4 -17.5 -4.91 1.095 103.7 0.272	0.631 226.7 351.2 0.460D 0.803A 4.35 1.660 88.1 279.4 20.5 0.360
5.08	8.77		-/- 36.8 0.0 199.2 0.0 0.310	1.044 123.0 30.6 12.513 0.646 3.164 32.0 172.9 82.0 78.1 1.397
42040.0	42089.2	0.288	293.6 -9.5 3.77 0.948 106.1 0.299	0.882 232.2 293.1 0.618D 1.146A 1.01 1.284 76.2 189.7 4.0 0.317
42089.2	42140.0	0.317	224.4 -16.3 -4.79 1.103 104.5 0.279	0.638 229.5 352.0 0.460D 0.816A 4.14 1.665 88.3 279.0 19.3 0.363
6.18	8.88		-/- 39.9 0.0 201.2 0.0 0.316	1.044 120.6 30.9 13.475 0.589 2.933 31.7 167.8 81.6 82.0 1.138
			ARRIVAL DATE = 2442142.0	
41940.0	42081.9	0.181	303.3 11.5 5.93 0.899 83.7 0.217	0.847 155.7 304.7 0.663D 1.030 -6.57 1.266 81.0 173.2 -34.5 0.253
42081.9	42142.0	0.252	228.9 -28.0 -6.49 1.063 99.3 0.246	0.604 211.6 351.4 0.456D 0.753A 6.12 1.651 88.3 277.9 28.9 0.365
4.49	8.91		-/- 47.5 0.0 189.5 0.0 0.287	1.071 107.3 -6.9 11.525 0.929 2.483 35.3 142.3 76.2 82.3 1.378
41950.0	42081.6	0.168	309.4 7.6 4.62 0.893 84.4 0.222	0.835 159.5 298.3 0.650D 1.021 -4.98 1.260 80.0 175.7 -25.4 0.251
42081.6	42142.0	0.251	229.1 -28.5 -6.55 1.062 99.1 0.245	0.604 211.0 351.3 0.456D 0.752A 6.21 1.650 88.3 277.9 29.3 0.365
4.33	8.92		-/- 47.3 0.0 189.0 0.0 0.286	1.071 114.0 3.4 11.433 0.940 2.495 29.9 151.6 76.3 75.0 1.405
41960.0	42082.3	0.159	313.6 6.4 4.01 0.888 85.4 0.226	0.826 163.7 293.7 0.639D 1.012 -4.03 1.254 79.3 179.1 -19.9 0.254
42082.3	42142.0	0.254	229.7 -27.5 -6.41 1.064 99.5 0.247	0.605 212.2 351.6 0.456D 0.755A 6.03 1.651 88.3 277.8 28.4 0.364
4.21	8.91		-/- 45.8 0.0 190.0 0.0 0.288	1.071 117.5 8.9 11.416 0.916 2.573 27.5 157.4 76.1 72.7 1.440
41970.0	42083.1	0.151	316.1 6.0 3.64 0.884 86.6 0.229	0.817 168.2 289.7 0.630D 1.003 -3.28 1.249 78.7 182.4 -15.7 0.259
42083.1	42142.0	0.250	228.2 -26.2 -6.25 1.066 100.0 0.250	0.607 213.9 351.9 0.456D 0.759A 5.80 1.653 88.4 277.7 27.3 0.364
4.13	8.89		-/- 43.8 0.0 191.4 0.0 0.291	1.071 120.1 13.2 11.419 0.883 2.680 26.5 162.0 75.9 71.8 1.483
41980.0	42084.0	0.145	316.8 5.5 3.40 0.880 88.0 0.232	0.809 173.3 286.2 0.621D 0.997 -2.63 1.244 78.2 185.6 -12.2 0.265
42084.0	42142.0	0.265	227.8 -24.9 -6.08 1.070 100.5 0.253	0.610 215.6 352.2 0.456D 0.764A 5.58 1.655 88.4 277.6 26.3 0.364
4.06	8.89		-/- 41.9 0.0 192.8 0.0 0.294	1.071 122.2 17.1 11.451 0.846 2.800 26.6 165.9 75.7 71.4 1.523
41990.0	42084.8	0.142	315.3 4.5 3.27 0.878 89.7 0.236	0.802 179.0 283.3 0.613D 0.992 -2.04 1.240 77.7 188.3 -9.2 0.271
42084.8	42142.0	0.270	227.5 -23.7 -5.93 1.073 101.0 0.256	0.613 217.3 352.6 0.456D 0.769A 5.38 1.657 88.5 277.5 25.2 0.364
4.03	8.89		-/- 40.1 0.0 194.1 0.0 0.297	1.071 124.0 20.8 11.523 0.809 2.914 27.6 169.2 75.4 71.5 1.549
42000.0	42085.6	0.145	311.5 2.6 3.21 0.877 91.8 0.241	0.799 185.7 281.3 0.607D 0.991A -1.47 1.237 77.3 190.6 -6.4 0.277
42085.6	42142.0	0.277	227.2 -22.5 -5.90 1.076 101.5 0.259	0.615 219.0 352.9 0.456D 0.775A 5.19 1.659 88.5 277.3 24.3 0.365
4.05	8.91		-/- 38.8 0.0 195.5 0.0 0.300	1.071 125.3 24.3 11.647 0.773 3.008 29.2 172.0 75.2 72.0 1.553
42010.0	42086.4	0.156	306.2 -0.2 3.22 0.880 94.4 0.246	0.799 193.6 280.5 0.602D 0.996A -0.91 1.238 76.9 192.2 -3.9 0.283
42086.4	42142.0	0.283	227.0 -21.6 -5.68 1.080 102.0 0.262	0.618 220.6 353.3 0.456D 0.780A 5.01 1.662 88.6 277.2 23.4 0.366
4.17	8.94		-/- 38.2 0.0 196.7 0.0 0.303	1.071 126.1 27.5 11.850 0.738 3.059 31.1 174.1 74.9 72.9 1.519
42020.0	42087.2	0.180	300.7 -3.6 3.31 0.890 97.6 0.255	0.808 203.5 281.6 0.602D 1.014A -0.32 1.243 76.7 192.9 -1.3 0.291
42087.2	42142.0	0.291	226.9 -20.7 -5.56 1.083 102.6 0.266	0.621 222.4 353.7 0.456D 0.787A 4.83 1.664 88.7 277.0 22.5 0.367
4.47	8.97		-/- 38.3 0.0 198.1 0.0 0.307	1.071 126.1 30.1 12.174 0.701 3.046 32.7 174.7 74.7 74.5 1.434
42030.0	42088.2	0.222	296.2 -6.9 3.49 0.910 101.5 0.269	0.831 216.2 285.7 0.608D 1.054A 0.30 1.257 76.4 192.3 1.2 0.300
42088.2	42142.0	0.300	226.7 -19.6 -5.44 1.088 103.2 0.271	0.626 224.4 354.2 0.456D 0.795A 4.64 1.667 88.8 276.8 21.4 0.369
5.07	9.03		-/- 39.7 0.0 199.6 0.0 0.311	1.071 125.0 31.7 12.715 0.659 2.947 33.4 172.6 74.4 77.0 1.283
42040.0	42089.5	0.287	293.4 -9.5 3.76 0.950 106.1 0.297	0.884 232.5 293.9 0.621D 1.146A 1.00 1.285 76.4 189.7 4.0 0.313
42089.5	42142.0	0.313	226.6 -18.2 -5.28 1.096 104.1 0.278	0.632 227.2 354.9 0.456D 0.808A 4.39 1.672 88.9 276.5 20.1 0.372
6.16	9.13		-/- 42.6 0.0 201.7 0.0 0.317	1.071 122.3 31.7 13.659 0.603 2.753 32.7 167.3 73.9 81.0 1.057
			ARRIVAL DATE = 2442144.0	
41930.0	42075.1	0.190	300.2 4.4 5.09 0.896 82.2 0.232	0.847 152.1 299.7 0.650D 1.044 -6.33 1.266 79.7 164.8 -30.7 0.270
42075.1	42144.0	0.269	239.7 -46.2-10.79 1.043 94.9 0.235	0.589 196.6 353.2 0.451D 0.728A 10.64 1.653 88.7 274.4 45.1 0.431
4.61	10.80	920.4	-/- 58.4 6.6 178.4 0.0 0.271	1.098 117.9 14.9 12.825 0.816 2.287 47.6 146.7 72.6 61.6 0.856
41940.0	42080.4	0.180	304.2 9.0 5.42 0.897 83.5 0.221	0.844 155.7 302.2 0.658D 1.031 -6.14 1.265 80.5 172.0 -31.5 0.255
42080.4	42144.0	0.255	233.8 -35.2 -8.10 1.052 97.7 0.244	0.596 205.8 353.9 0.451D 0.742A 7.61 1.659 88.8 275.5 34.2 0.391
4.47	9.66		-/- 50.9 0.0 187.0 0.0 0.282	1.098 114.9 3.6 12.022 0.912 2.326 37.7 145.4 70.3 72.2 1.209
41950.0	42080.6	0.169	309.9 6.3 4.41 0.891 84.3 0.226	0.834 159.5 296.6 0.646D 1.022 -4.83 1.259 79.6 175.0 -24.1 0.255
42080.6	42144.0	0.255	233.6 -34.7 -8.01 1.053 97.9 0.244	0.597 206.2 354.0 0.451D 0.742A 7.51 1.659 88.8 275.5 33.8 0.390
4.33	9.64		-/- 51.4 0.0 187.4 0.0 0.283	1.098 119.7 10.8 12.091 0.909 2.307 35.0 153.1 70.3 68.1 1.188
41960.0	42081.7	0.160	313.8 5.8 3.92 0.887 85.3 0.228	0.824 163.6 292.7 0.637D 1.012 -3.98 1.253 79.1 178.7 -19.3 0.257
42081.7	42144.0	0.257	232.7 -32.7 -7.66 1.055 98.5 0.247	0.599 208.2 354.2 0.451D 0.746A 7.09 1.661 88.9 275.5 32.0 0.387
4.22	9.54		-/- 49.9 0.0 189.1 0.0 0.286	1.098 122.1 14.4 12.008 0.894 2.375 32.8 158.1 69.9 67.7 1.230
41970.0	42082.8	0.152	316.3 5.7 3.61 0.883 86.5 0.230	0.816 168.2 289.2 0.628D 1.004 -3.26 1.248 78.6 182.2 -15.5 0.261
42082.8	42144.0	0.261	231.9 -30.7 -7.32 1.058 99.1 0.250	0.601 210.3 354.6 0.451D 0.751A 6.68 1.663 88.9 275.5 30.2 0.384
4.13	9.46		-/- 47.7 0.0 190.9 0.0 0.290	1.098 124.1 17.5 11.934 0.870 2.472 31.4 162.3 69.5 67.9 1.281
41980.0	42083.8	0.146	316.9 5.4 3.39 0.880 88.0 0.233	0.808 173.2 286.0 0.620D 0.997 -2.63 1.244 78.1 185.5 -12.1 0.266
42083.8	42144.0	0.265	231.3 -28.9 -7.04 1.062 99.7 0.253	0.604 212.3 354.9 0.451D 0.756A 6.33 1.665 89.0 275.5 28.7 0.382
4.07	9.41		-/- 45.7 0.0 192.6 0.0 0.293	1.098 125.8 20.6 11.910 0.841 2.575 31.0 166.0 69.1 68.3 1.324
41990.0	42084.8	0.142	315.3 4.5 3.27 0.878 89.7 0.236	0.802 179.0 283.3 0.613D 0.992 -2.04 1.240 77.7 188.3 -9.2 0.271
42084.8	42144.0	0.270	230.8 -27.3 -6.80 1.065 100.3 0.256	0.606 214.2 355.2 0.451D 0.761A 6.02 1.667 89.0 275.4 27.3 0.381
4.03	9.38		-/- 43.9 0.0 194.1 0.0 0.297	1.098 127.3 23.6 11.937 0.809 2.675 31.4 169.2 68.8 68.9 1.355

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL LEG	R A DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COISTI	SMA SMA COIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
42000.0	42085.7	0.144	311.5	2.7	3.21	0.877	91.8	0.240	0.799	185.7	281.5	0.607D	0.991A	-1.47	1.238	77.3	190.7	-6.4	0.276
42085.7	42144.0	0.276	230.3	-25.9	-6.59	1.068	100.9	0.259	0.609	216.0	355.6	0.451D	0.767A	5.75	1.669	89.1	275.4	26.1	0.381
4.05	9.37		-/-	42.5	0.0	195.6	0.0	0.300	1.098	128.3	26.5	12.022	0.777	2.759	32.3	171.9	68.5	69.8	1.366
42010.0	42086.6	0.155	306.1	-0.2	3.23	0.881	94.4	0.246	0.800	193.7	280.8	0.604D	0.997A	-0.90	1.238	77.0	192.3	-3.9	0.282
42086.6	42144.0	0.282	230.0	-24.6	-6.41	1.072	101.4	0.262	0.612	217.7	355.9	0.451D	0.772A	5.52	1.672	89.2	275.3	24.9	0.381
4.17	9.38		-/-	41.8	0.0	197.0	0.0	0.304	1.098	128.9	29.3	12.196	0.745	2.805	33.6	173.9	68.2	71.0	1.344
42020.0	42087.4	0.179	300.5	-3.6	3.32	0.890	97.6	0.253	0.809	203.7	282.1	0.604D	1.014A	-0.32	1.244	76.8	193.0	-1.3	0.289
42087.4	42144.0	0.289	229.7	-23.3	-6.24	1.075	102.0	0.266	0.615	219.5	356.3	0.451D	0.778A	5.28	1.674	89.2	275.2	23.8	0.382
4.46	9.40		-/-	41.8	0.0	198.4	0.0	0.308	1.098	128.7	31.5	12.494	0.710	2.801	34.6	174.4	67.9	72.8	1.279
42030.0	42088.4	0.221	296.0	-6.8	3.49	0.911	101.4	0.267	0.832	216.4	286.3	0.610D	1.054A	0.30	1.257	76.6	192.4	1.3	0.297
42088.4	42144.0	0.297	229.5	-22.0	-6.06	1.080	102.7	0.270	0.619	221.6	356.8	0.451D	0.786A	5.03	1.677	89.3	275.1	22.6	0.383
5.05	9.44		-/-	43.1	0.0	200.0	0.0	0.312	1.098	127.3	32.7	13.008	0.670	2.725	34.9	172.2	67.6	75.5	1.157
42040.0	42089.8	0.286	293.2	-9.5	3.75	0.951	106.0	0.296	0.885	232.8	294.7	0.623D	1.147A	1.00	1.286	76.6	189.7	4.0	0.310
42089.8	42144.0	0.310	229.3	-20.3	-5.84	1.087	103.6	0.277	0.625	224.5	357.5	0.451D	0.798A	4.72	1.682	89.5	274.9	21.0	0.386
6.13	9.51	386.7	-/-	45.8	2.4	202.2	0.0	0.319	1.098	123.0	32.6	13.612	0.617	2.703	33.8	166.9	67.1	80.9	0.967

ARRIVAL DATE = 2442146.0

41920.0	42077.2	0.220	290.9	15.7	8.54	0.905	81.9	0.222	0.862	148.6	309.2	0.670D	1.053	-9.94	1.274	81.4	165.1	-47.6	0.295
42077.2	42146.0	0.295	242.7	-48.0	-12.71	1.039	95.3	0.241	0.587	197.1	356.2	0.445D	0.729A	11.71	1.669	89.3	272.3	46.7	0.465
5.03	11.80	527.3	-/-	49.8	3.4	181.8	0.0	0.275	1.124	113.2	1.7	13.307	0.682	2.539	54.7	130.2	68.0	68.6	0.937
41930.0	42080.8	0.202	296.7	15.5	7.63	0.903	82.9	0.216	0.856	152.0	308.8	0.671D	1.041	-8.60	1.271	81.6	170.1	-43.7	0.272
42080.8	42146.0	0.272	238.3	-39.9	-9.70	1.045	97.2	0.247	0.591	203.3	356.7	0.445D	0.738A	8.97	1.673	89.3	273.7	37.8	0.425
4.78	10.64		-/-	49.5	0.0	187.6	0.0	0.283	1.124	111.7	-3.3	12.663	0.800	2.388	47.4	133.6	65.4	75.9	1.110
41970.0	42081.2	0.155	317.0	4.3	3.44	0.880	86.3	0.237	0.812	167.9	286.4	0.620D	1.004	-3.18	1.246	78.0	181.1	-14.4	0.271
42081.2	42146.0	0.271	237.8	-39.0	-9.46	1.046	97.5	0.248	0.592	204.1	356.8	0.445D	0.739A	8.70	1.674	89.4	273.8	36.9	0.422
4.17	10.55	533.8	-/-	55.2	3.8	188.3	0.0	0.285	1.124	129.2	25.2	12.859	0.805	2.304	40.0	163.9	65.2	62.3	0.932
41980.0	42083.1	0.140	317.3	4.8	3.33	0.878	87.9	0.236	0.806	173.1	284.6	0.616D	0.997	-2.60	1.242	77.8	184.9	-11.7	0.271
42083.1	42146.0	0.271	236.1	-35.1	-8.61	1.051	98.5	0.252	0.596	207.5	357.2	0.445D	0.746A	7.73	1.677	89.4	274.1	33.2	0.412
4.08	10.26	23.2	-/-	51.7	0.2	191.3	0.0	0.291	1.124	131.0	25.2	12.852	0.807	2.301	37.3	166.7	64.2	63.4	1.044
41990.0	42084.4	0.143	315.6	4.3	3.24	0.877	89.6	0.238	0.801	179.9	282.6	0.610D	0.992	-2.03	1.239	77.5	188.1	-9.0	0.274
42084.4	42146.0	0.274	235.0	-32.3	-8.08	1.055	99.3	0.256	0.598	210.0	357.6	0.445D	0.752A	7.12	1.679	89.5	274.2	30.7	0.407
4.04	10.12		-/-	49.2	0.0	193.5	0.0	0.295	1.124	131.7	27.0	12.692	0.791	2.403	36.3	169.5	63.5	65.1	1.110
42000.0	42085.5	0.145	311.6	2.6	3.20	0.877	91.8	0.241	0.798	185.6	281.1	0.606D	0.991A	-1.47	1.237	77.3	190.6	-6.4	0.278
42085.5	42146.0	0.277	234.3	-30.2	-7.71	1.058	100.0	0.259	0.601	212.1	357.9	0.445D	0.757A	6.66	1.682	89.6	274.2	28.9	0.404
4.05	10.04		-/-	47.4	0.0	195.3	0.0	0.300	1.124	132.3	29.2	12.662	0.769	2.487	36.3	172.0	63.0	66.6	1.143
42010.0	42086.5	0.155	306.1	-0.2	3.22	0.881	94.4	0.246	0.800	193.7	280.7	0.603D	0.996A	-0.90	1.238	77.0	192.3	-3.9	0.282
42086.5	42146.0	0.282	233.7	-28.4	-7.40	1.052	100.7	0.263	0.604	214.1	358.3	0.445D	0.763A	6.29	1.684	89.6	274.3	27.3	0.403
4.17	10.00		-/-	46.4	0.0	196.9	0.0	0.304	1.124	132.5	31.3	12.753	0.743	2.539	36.7	174.0	62.6	68.4	1.143
42020.0	42087.5	0.179	300.4	-3.6	3.32	0.891	97.6	0.253	0.809	203.7	282.3	0.604D	1.014A	-0.32	1.244	76.8	193.0	-1.4	0.288
42087.5	42146.0	0.288	233.3	-26.8	-7.13	1.066	101.3	0.266	0.607	216.1	359.7	0.445D	0.769A	5.95	1.686	89.7	274.3	25.8	0.402
4.46	9.98		-/-	46.2	0.0	198.5	0.0	0.308	1.124	131.9	33.0	12.986	0.714	2.549	37.0	174.4	62.2	70.5	1.106
42030.0	42088.6	0.221	295.9	-6.8	3.49	0.912	101.4	0.266	0.833	216.6	286.7	0.611D	1.055A	0.30	1.258	76.7	192.4	1.3	0.296
42088.6	42146.0	0.295	232.8	-25.0	-6.86	1.070	102.0	0.271	0.611	218.3	359.1	0.445D	0.776A	5.60	1.689	89.8	274.2	24.2	0.402
5.05	9.99	144.6	-/-	47.1	0.9	200.3	0.0	0.313	1.124	129.7	33.9	13.325	0.678	2.549	36.7	172.0	61.8	74.0	1.017
42040.0	42090.0	0.285	293.0	-9.5	3.74	0.951	106.0	0.294	0.886	233.1	295.4	0.625D	1.147A	0.99	1.286	76.7	189.7	4.0	0.307
42090.0	42146.0	0.307	232.5	-22.9	-6.54	1.077	103.0	0.277	0.616	221.2	359.7	0.445D	0.787A	5.18	1.694	89.9	274.1	22.3	0.404
6.12	10.03	906.1	-/-	49.6	5.7	202.6	0.0	0.320	1.124	123.6	33.7	13.556	0.628	2.672	35.1	166.5	61.3	80.9	0.868

ARRIVAL DATE = 2442148.0

41920.0	42079.5	0.243	298.3	22.3	10.88	0.907	82.1	0.217	0.865	148.5	312.7	0.677D	1.052	-12.17	1.276	82.1	169.2	-55.5	0.323
42079.5	42148.0	0.323	246.2	-49.4	-13.79	1.035	95.7	0.250	0.584	197.6	359.1	0.438D	0.730A	12.92	1.689	89.8	271.1	48.2	0.506
5.40	12.98	649.5	-/-	44.9	3.9	185.5	0.0	0.280	1.149	111.8	-3.2	13.885	0.567	2.853	59.4	123.0	64.4	73.7	0.917
41930.0	42083.3	0.220	294.2	21.6	9.49	0.905	83.1	0.210	0.859	152.0	312.8	0.679D	1.040	-10.34	1.273	82.3	173.3	-51.4	0.290
42083.3	42149.0	0.290	241.2	-40.3	-10.47	1.042	97.8	0.257	0.589	204.3	359.7	0.438D	0.740A	9.35	1.693	89.9	273.2	37.5	0.452
5.02	11.41		-/-	46.8	0.0	191.7	0.0	0.291	1.149	108.8	-9.7	13.145	0.705	2.518	52.8	126.3	60.5	83.0	1.070
42010.0	42085.9	0.157	306.7	-0.4	3.21	0.878	94.4	0.249	0.797	193.4	279.4	0.599D	0.996A	-0.91	1.237	76.7	192.0	-3.8	0.288
42085.9	42148.0	0.288	238.7	-34.4	-9.03	1.049	99.4	0.263	0.595	209.1	360.4	0.438	0.751A	7.75	1.698	90.1	273.9	31.7	0.435
4.19	10.92	774.7	-/-	53.0	5.2	195.9	0.0	0.301	1.149	134.8	35.1	13.172	0.715	2.468	41.4	174.5	58.6	66.7	0.888
42020.0	42087.2	0.180	300.7	-3.6	3.31	0.890	97.6	0.255	0.808	203.5	281.6	0.602D	1.014A	-0.32	1.243	76.6	192.9	-1.3	0.291
42087.2	42148.0	0.291	237.7	-31.7	-8.46	1.054	100.3	0.267	0.598	211.6	360.8	0.438	0.758A	7.09	1.701	90.2	274.0	29.2	0.430
4.47	10.79	723.6	-/-	52.0	4.8	198.1	0.0	0.307	1.149	133.6	35.8	13.231	0.701	2.498	40.4	174.7	57.9	69.5	0.898
42030.0	42088.5	0.221	295.9	-6.8	3.49	0.911	101.4	0.267	0.833	216.5	286.6	0.611D	1.055A	0.30	1.258	76.6	192.4	1.3	0.296
42088.5	42148.0	0.296	237.0	-29.1	-7.98	1.058	101.1	0.272	0.602	214.2	361.2	0.438	0.765A	6.52	1.704	90.3	274.1	26.9	0.428
5.05	10.71	958.8	-/-	52.3	6.2	200.2	0.0	0.313	1.149	130.3	36.2	13.337	0.675	2.555	39.2	172.1	57.2	73.8	0.857

ARRIVAL DATE = 2442150.0

41930.0	42085.1	0.240	291.9	26.3	11.35	0.907	83.3	0.206	0.861	152.0	315.7	0.684D	1.039	-12.10	1.274	82.8	176.6	-57.5	0.314
42085.1	42150.0	0.314	245.4	-42.6	-11.95	1.036	98.0	0.265	0.585	203.6	362.5	0.430	0.740A	10.50	1.715	90.5	273.4	39.5	0.492
5.36	12.56	300.6	-/-	44.5	1.9	194.6	0.0	0.298	1.174	107.7	-11.9	13.699	0.600	2.750	58.2	120.8	57.2	87.0	0.985

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A DECL	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COIST1	SMA SMA COIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
									ARRIVAL DATE = 2442726.0										
42560.0	42661.0	0.156	165.2	-14.5	-3.47	0.849	86.4	0.277	0.798	170.6	272.7	0.577D	1.019	0.66	1.223	74.8	34.6	2.5	0.317
42661.0	42726.0	0.317	78.7	-16.2	-5.23	0.995	103.4	0.357	0.569	207.1	404.5	0.366	0.772A	9.04	1.815	101.3	189.2	51.5	0.357
4.18	8.70	880.9	-/+	47.4	5.3	36.6	0.0	0.297	1.313	326.5	23.9	13.765	0.588	2.787	24.8	176.9	84.6	71.8	0.874
42570.0	42661.7	0.155	162.5	-13.3	-3.40	0.841	88.6	0.283	0.791	175.4	270.2	0.567D	1.016	0.08	1.219	74.2	37.1	0.3	0.327
42661.7	42726.0	0.327	78.5	-16.8	-5.60	0.999	104.0	0.360	0.571	208.3	404.6	0.366	0.776A	9.41	1.817	101.4	188.4	52.7	0.366
4.17	8.06	658.7	-/+	44.2	3.9	37.7	0.0	0.299	1.313	329.0	23.3	13.968	0.553	2.899	24.8	179.3	84.3	70.5	0.916
42580.0	42662.4	0.160	160.0	-11.1	-3.40	0.836	91.2	0.291	0.787	182.9	268.3	0.558D	1.016A	-0.48	1.217	73.7	39.2	-1.7	0.338
42662.4	42726.0	0.337	78.3	-17.5	-6.00	1.003	104.6	0.363	0.573	209.5	404.7	0.365	0.781A	9.83	1.819	101.5	187.6	53.9	0.377
4.22	8.25	506.1	-/+	41.6	2.9	38.8	0.0	0.301	1.313	331.0	22.7	14.181	0.520	3.019	24.9	178.3	83.9	69.6	0.946
42590.0	42663.1	0.173	155.4	-7.9	-3.47	0.836	94.4	0.299	0.788	190.6	267.5	0.552D	1.024A	-1.06	1.217	73.2	40.8	-3.5	0.348
42663.1	42726.0	0.348	78.2	-19.3	-6.47	1.007	105.2	0.366	0.576	210.7	404.7	0.365	0.786A	10.32	1.821	101.6	186.6	55.3	0.389
4.39	8.63	454.3	-/+	39.5	2.5	40.0	0.0	0.303	1.313	332.4	22.2	14.412	0.488	3.151	25.0	176.4	83.6	69.3	0.956
42600.0	42663.8	0.201	150.7	-4.3	-3.63	0.844	98.4	0.310	0.797	198.8	268.4	0.550D	1.044A	-1.67	1.223	72.7	41.6	-5.4	0.361
42663.8	42726.0	0.361	78.2	-19.3	-7.04	1.011	105.9	0.369	0.578	212.0	404.8	0.365	0.792A	10.91	1.823	101.7	185.5	56.9	0.403
4.76	10.01	574.7	-/+	38.3	3.1	41.1	0.0	0.305	1.313	333.9	21.5	14.680	0.455	3.307	25.1	174.6	83.3	69.8	0.933
									ARRIVAL DATE = 2442728.0										
42540.0	42660.1	0.165	152.5	-15.4	-3.32	0.871	83.4	0.260	0.817	160.4	280.5	0.605D	1.030	1.97	1.235	76.3	29.3	8.1	0.293
42660.1	42728.0	0.293	79.3	-7.7	-2.33	0.991	102.4	0.352	0.566	205.2	411.3	0.367	0.765A	6.31	1.776	102.7	184.6	38.5	0.306
4.29	7.24	950.0	-/+	52.3	5.6	35.3	0.0	0.295	1.340	321.3	18.2	13.273	0.690	2.521	18.2	170.0	73.9	74.7	0.875
42550.0	42661.0	0.158	164.5	-15.3	-3.66	0.861	84.8	0.266	0.808	165.3	277.1	0.593D	1.023	1.28	1.230	75.7	32.4	5.1	0.302
42661.0	42728.0	0.302	79.0	-7.9	-2.45	0.995	103.1	0.355	0.568	206.6	411.4	0.367	0.770A	6.43	1.777	102.8	184.0	38.8	0.310
4.21	7.37	508.3	-/+	48.2	3.2	36.6	0.0	0.297	1.340	324.4	16.1	13.445	0.651	2.613	16.1	173.4	73.5	73.0	0.942
42560.0	42661.8	0.153	164.7	-14.9	-3.42	0.851	86.6	0.272	0.801	170.7	274.1	0.583D	1.018	0.66	1.225	75.1	35.2	2.5	0.311
42661.8	42728.0	0.310	78.6	-8.1	-2.58	0.998	103.8	0.358	0.570	207.9	411.4	0.366	0.774A	6.57	1.779	102.9	183.3	39.2	0.314
4.15	7.40	211.0	-/+	44.6	1.3	37.9	0.0	0.299	1.340	326.9	14.1	13.625	0.614	2.710	14.4	176.3	73.1	71.6	1.004
42570.0	42662.6	0.152	162.9	-13.6	-3.40	0.844	88.7	0.278	0.795	176.6	271.7	0.574D	1.016	0.08	1.221	74.6	37.7	0.3	0.320
42662.6	42728.0	0.320	78.4	-8.3	-2.71	1.002	104.4	0.361	0.573	209.2	411.5	0.366	0.779A	6.72	1.781	103.0	182.6	39.6	0.319
4.13	7.67		-/+	41.5	0.0	39.1	0.0	0.301	1.340	328.8	12.1	13.780	0.580	2.825	12.9	178.5	72.6	70.7	1.058
42580.0	42663.3	0.166	159.3	-11.3	-3.39	0.840	91.3	0.285	0.791	183.2	270.0	0.566D	1.017A	-0.48	1.219	74.1	39.8	-1.7	0.329
42663.3	42728.0	0.329	78.2	-8.5	-2.86	1.006	105.1	0.364	0.575	210.5	411.5	0.366	0.785A	6.88	1.783	103.1	181.8	40.0	0.323
4.18	7.75		-/+	38.8	0.0	40.3	0.0	0.303	1.340	329.8	10.2	13.833	0.548	3.008	11.5	178.2	72.2	70.8	1.101
42590.0	42664.1	0.170	154.5	-7.9	-3.44	0.840	94.5	0.292	0.793	191.0	269.5	0.561D	1.024A	-1.05	1.220	73.7	41.3	-3.7	0.338
42664.1	42728.0	0.338	78.0	-8.7	-3.03	1.010	105.7	0.368	0.578	211.8	411.6	0.365	0.790A	7.06	1.786	103.2	181.1	40.5	0.329
4.35	7.90		-/+	36.9	0.0	41.5	0.0	0.306	1.340	330.5	8.0	13.980	0.517	3.163	10.3	176.3	71.8	71.2	1.119
42600.0	42664.9	0.187	149.8	-4.1	-3.58	0.849	98.3	0.301	0.802	200.4	270.7	0.561D	1.044A	-1.65	1.227	73.3	42.1	-5.6	0.349
42664.9	42728.0	0.349	77.9	-9.0	-3.23	1.015	106.5	0.372	0.581	213.1	411.7	0.365	0.797A	7.27	1.788	103.3	180.2	41.1	0.335
4.70	8.07		-/+	35.7	0.0	42.8	0.0	0.308	1.340	330.7	5.6	14.277	0.486	3.258	9.5	174.4	71.3	72.2	1.098
42610.0	42665.3	0.242	146.0	-0.6	-3.79	0.872	103.0	0.316	0.828	212.3	274.6	0.566D	1.089A	-2.30	1.242	72.9	41.7	-7.5	0.362
42665.3	42728.0	0.362	77.9	-9.5	-3.51	1.020	107.3	0.377	0.585	214.7	411.8	0.364	0.805A	7.56	1.791	103.5	179.1	41.9	0.343
5.30	8.31	167.8	-/+	35.9	0.9	44.3	0.0	0.312	1.340	329.8	3.2	14.718	0.451	3.329	9.5	172.0	70.7	74.6	1.014
									ARRIVAL DATE = 2442730.0										
42540.0	42660.6	0.164	162.3	-15.6	-3.95	0.872	83.5	0.258	0.818	160.4	281.2	0.607D	1.029	1.99	1.236	76.5	29.7	8.3	0.290
42660.6	42730.0	0.290	80.2	-3.1	-0.93	0.991	102.4	0.352	0.566	205.1	417.5	0.367	0.765A	5.09	1.741	104.0	180.8	29.9	0.300
4.27	7.11	640.6	-/+	51.7	4.3	36.0	0.0	0.296	1.364	322.2	13.0	13.210	0.706	2.487	13.5	169.6	62.9	74.2	0.914
42550.0	42661.4	0.157	164.2	-15.6	-3.67	0.862	84.9	0.264	0.810	165.3	277.9	0.596D	1.023	1.29	1.231	75.9	32.7	5.2	0.298
42661.4	42730.0	0.298	79.8	-3.1	-0.97	0.994	103.0	0.355	0.568	206.4	417.5	0.366	0.769A	5.13	1.743	104.1	180.3	29.9	0.303
4.19	7.19	323.3	-/+	47.8	2.1	37.3	0.0	0.298	1.364	325.0	10.3	13.375	0.667	2.575	10.4	173.1	62.5	72.6	0.979
42560.0	42662.3	0.152	164.4	-15.1	-3.50	0.853	86.6	0.269	0.802	170.7	274.9	0.586D	1.018	0.66	1.226	75.3	35.5	2.6	0.307
42662.3	42730.0	0.307	79.5	-3.2	-1.01	0.998	103.7	0.358	0.570	207.7	417.5	0.366	0.774A	5.18	1.745	104.2	179.7	29.9	0.306
4.13	7.27	50.1	-/+	44.3	0.3	38.6	0.0	0.300	1.364	327.4	7.6	13.548	0.630	2.668	7.6	176.0	62.0	71.4	1.039
42570.0	42663.0	0.150	162.6	-13.7	-3.40	0.846	88.7	0.275	0.796	176.6	272.6	0.577D	1.015	0.08	1.223	74.8	38.0	0.3	0.315
42663.0	42730.0	0.315	79.2	-3.2	-1.05	1.001	104.4	0.361	0.572	209.0	417.6	0.365	0.779A	5.22	1.747	104.3	179.2	29.9	0.309
4.12	7.36		-/+	41.4	0.0	39.9	0.0	0.303	1.364	328.7	5.0	13.591	0.595	2.831	5.2	178.1	61.6	71.2	1.090
42580.0	42663.8	0.155	158.9	-11.3	-3.38	0.841	91.3	0.282	0.793	183.4	271.0	0.570D	1.017A	-0.48	1.221	74.3	40.1	-1.8	0.324
42663.8	42730.0	0.324	79.1	-3.3	-1.09	1.005	105.0	0.365	0.574	210.3	417.6	0.365	0.784A	5.27	1.749	104.4	178.6	29.8	0.313
4.16	7.46		-/+	39.0	0.0	41.1	0.0	0.305	1.364	329.7	2.3	13.663	0.563	2.998	3.5	178.0	61.1	71.4	1.125
42590.0	42664.6	0.168	154.1	-7.9	-3.43	0.842	94.5	0.289	0.795	191.2	270.5	0.565D	1.024A	-1.05	1.222	73.9	41.6	-3.7	0.333
42664.6	42730.0	0.333	78.9	-3.3	-1.14	1.009	105.7	0.368	0.577	211.5	417.6	0.365	0.789A	5.32	1.751	104.6	178.0	29.8	0.316
4.32	7.56		-/+	37.3	0.0	42.3	0.0	0.307	1.364	330.2	-0.6	13.829	0.533	3.130	3.8	176.2	60.6	72.1	1.135
42600.0	42665.4	0.195	149.3	-4.1	-3.55	0.851	98.3	0.298	0.805	200.7	271.8	0.565D	1.045A	-1.64	1.228	73.6	42.3	-5.6	0.344
42665.4	42730.0	0.344	78.8	-3.4	-1.19	1.014	106.4	0.372	0.580	212.9	417.7	0.364	0.796A	5.38	1.754	104.7	177.4	29.8	0.321
4.68	7.67		-/+	36.5	0.0	43.6	0.0	0.310	1.364	330.3	-3.6	14.149	0.501	3.196	6.0	174.2	60.1	73.4	1.101
42610.0	42666.4	0.240	145.6	-0.5	-3.75	0.874	102.9	0.312	0.831	212.7	275.8	0.572D	1.090A	-2.28	1.244	73.3	41.8	-7.6	0.356
42666.4	42730.0	0.356	78.7	-3.5	-1.27	1.019	107.2	0.377	0.584	214.5	417.7	0.363	0.804A	5.47	1.757	104.9	176.5	29.8	0.326
5.35	7.82	207.5	-/+	36.9	1.1	45.1	0.0	0.314	1.364	329.1	-6.5	14.585	0.466	3.251	8.8	171.7	59.4	76.1	1.006
									ARRIVAL DATE = 2442732.0										
42530.0	42660.2	0.172	158.5	-16.0	-4.42	0.883	82.4	0.251	0.829	155.7	285.6	0.621D	1.036	2.84	1.242	77.2	26.7	12.4	0.279
42660.2	42732.0	0.279	82.1	0.0	0.0	0.986	101.5	0.349	0.562	203.2	423.0	0.366	0.759A	4.32	1.707	105.0	179.1	23.8	0.308
4.37	7.32	951.5	-/+	56.2	6.6	35.3	0.0	0.295	1.384	319.8	12.7	13.008	0.760	2.382	14.9	165.0	53.9	75.9	0.853

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
42540.0	42661.0	0.163	162.1	-15.9	-3.98	0.873	83.5	0.256	0.819	160.4	281.9	0.609D	1.029	2.00	1.237	76.6	29.9	8.4	0.287
42661.0	42732.0	0.287	81.6	0.0	0.0	0.989	102.1	0.352	0.564	204.5	423.0	0.366	0.763A	4.32	1.709	105.1	178.7	23.6	0.310
4.26	7.39	615.9	-/+	52.1	4.1	36.6	0.0	0.297	1.384	323.1	9.4	13.155	0.720	2.458	10.7	169.3	53.5	73.8	0.918
42550.0	42661.8	0.156	164.1	-15.8	-3.69	0.863	84.9	0.262	0.811	165.4	278.5	0.599D	1.023	1.30	1.232	76.0	33.0	5.3	0.295
42661.8	42732.0	0.295	81.2	0.1	0.0	0.992	102.8	0.355	0.566	205.8	423.0	0.365	0.767A	4.32	1.711	105.2	178.3	23.4	0.313
4.18	7.46	325.7	-/+	49.4	2.1	37.9	0.0	0.299	1.384	325.8	6.3	13.315	0.680	2.543	7.0	172.8	53.1	72.3	0.978
42560.0	42662.7	0.151	164.2	-15.2	-3.50	0.854	86.7	0.267	0.803	170.8	275.6	0.589D	1.018	0.67	1.227	75.5	35.8	2.6	0.303
42662.7	42732.0	0.303	80.9	0.1	0.0	0.995	103.5	0.358	0.568	207.1	423.0	0.365	0.772A	4.32	1.713	105.3	177.9	23.2	0.316
4.12	7.54	80.8	-/+	45.2	0.5	39.2	0.0	0.302	1.384	328.0	3.3	13.482	0.643	2.633	3.6	175.7	52.7	71.3	1.032
42570.0	42663.4	0.149	162.3	-13.8	-3.40	0.847	88.8	0.273	0.798	176.7	273.3	0.580D	1.015	0.08	1.224	75.0	38.3	0.3	0.312
42663.4	42732.0	0.312	80.6	0.1	0.00	0.999	104.1	0.361	0.570	208.4	423.0	0.364	0.776A	4.32	1.715	105.5	177.5	23.0	0.319
4.10	7.67		-/+	42.4	0.0	40.5	0.0	0.304	1.384	329.5	0.4	13.567	0.609	2.767	0.4	177.7	52.2	71.0	1.075
42580.0	42664.2	0.153	158.5	-11.4	-3.37	0.843	91.3	0.279	0.795	183.5	271.7	0.573D	1.017A	-0.48	1.222	74.5	40.3	-1.8	0.321
42664.2	42732.0	0.320	80.4	0.1	0.01	1.002	104.8	0.364	0.573	209.6	423.0	0.364	0.781A	4.32	1.717	105.6	177.1	22.8	0.322
4.15	7.71		-/+	40.2	0.0	41.7	0.0	0.306	1.384	330.3	-2.7	13.655	0.576	2.913	2.8	177.7	51.8	71.4	1.102
42590.0	42665.0	0.167	153.7	-7.9	-3.42	0.844	94.5	0.286	0.797	191.4	271.3	0.569D	1.025A	-1.05	1.223	74.1	41.8	-3.8	0.329
42665.0	42732.0	0.329	80.3	0.1	0.01	1.006	105.4	0.368	0.575	210.8	423.0	0.364	0.787A	4.32	1.719	105.7	176.6	22.5	0.325
4.31	7.80		-/+	38.7	0.0	42.9	0.0	0.309	1.384	330.9	-5.7	13.840	0.546	3.021	6.1	176.1	51.3	72.2	1.103
42600.0	42665.8	0.194	149.0	-4.0	-3.53	0.853	98.3	0.295	0.807	201.0	272.7	0.569D	1.045A	-1.64	1.230	73.8	42.5	-5.7	0.339
42665.8	42732.0	0.339	80.2	0.1	0.01	1.011	106.1	0.372	0.578	212.1	423.0	0.363	0.793A	4.32	1.721	105.8	176.1	22.3	0.329
4.66	7.91		-/+	38.1	0.0	44.2	0.0	0.312	1.384	330.9	-8.8	14.181	0.514	3.065	9.3	174.0	50.8	73.5	1.062
42610.0	42666.8	0.238	145.3	-0.4	-3.72	0.876	102.8	0.309	0.833	213.1	276.8	0.576D	1.090A	-2.27	1.245	73.5	42.0	-7.7	0.352
42666.8	42732.0	0.352	80.1	0.1	0.01	1.016	106.9	0.377	0.581	213.7	423.1	0.362	0.801A	4.32	1.724	106.0	175.5	21.9	0.334
5.33	8.05	419.2	-/+	38.8	2.3	45.8	0.0	0.315	1.384	329.1	-11.7	14.482	0.479	3.192	12.4	171.4	50.2	76.9	0.963

ARRIVAL DATE = 2442734.0

42530.0	42660.6	0.171	158.3	-16.4	-4.47	0.884	82.5	0.249	0.829	155.7	286.2	0.623D	1.036	2.86	1.243	77.4	27.1	12.7	0.277
42660.6	42734.0	0.276	84.0	2.4	0.70	0.983	101.1	0.350	0.560	202.3	427.9	0.364	0.757A	3.82	1.678	106.0	178.4	19.2	0.326
4.36	7.84	999.4	-/+	57.2	7.0	36.0	0.0	0.296	1.402	320.8	10.1	12.957	0.775	2.355	13.7	164.6	46.0	75.5	0.844
42540.0	42661.4	0.162	161.9	-16.2	-4.01	0.874	83.6	0.254	0.820	160.4	282.5	0.612D	1.029	2.02	1.237	76.8	30.3	8.6	0.284
42661.4	42734.0	0.284	83.5	2.4	0.71	0.986	101.8	0.352	0.562	203.6	427.3	0.364	0.760A	3.79	1.680	106.1	178.1	19.0	0.329
4.25	7.91	689.5	-/+	53.3	4.7	37.3	0.0	0.298	1.402	323.9	6.6	13.098	0.735	2.428	9.2	168.9	45.7	73.4	0.903
42550.0	42662.3	0.155	163.9	-16.0	-3.70	0.864	85.0	0.260	0.812	165.4	279.2	0.601D	1.023	1.30	1.232	76.2	33.3	5.3	0.292
42662.3	42734.0	0.292	83.1	2.4	0.73	0.989	102.4	0.355	0.564	204.9	427.9	0.364	0.764A	3.77	1.682	106.2	177.8	18.7	0.332
4.17	7.98	422.8	-/+	49.7	2.9	38.6	0.0	0.300	1.402	326.6	3.4	13.253	0.695	2.510	5.5	172.5	45.4	72.1	0.958
42560.0	42663.1	0.180	163.9	-15.4	-3.51	0.855	86.7	0.265	0.805	170.8	276.4	0.592D	1.018	0.67	1.228	75.7	36.1	2.7	0.300
42663.1	42734.0	0.300	82.7	2.4	0.75	0.992	103.1	0.358	0.566	206.2	427.9	0.363	0.769A	3.74	1.684	106.3	177.5	18.4	0.334
4.11	8.06	200.9	-/+	46.6	1.3	39.9	0.0	0.303	1.402	328.8	0.3	13.414	0.658	2.596	2.8	175.3	45.0	71.2	1.005
42570.0	42663.9	0.148	162.0	-14.0	-3.40	0.848	88.8	0.270	0.799	176.8	274.1	0.583D	1.015	0.08	1.225	75.2	38.6	0.3	0.308
42663.9	42734.0	0.308	82.5	2.4	0.77	0.995	103.8	0.361	0.568	207.4	427.8	0.363	0.773A	3.72	1.685	106.4	177.2	18.1	0.337
4.09	8.14	34.8	-/+	43.9	0.2	41.2	0.0	0.305	1.402	330.5	-2.8	13.580	0.623	2.685	3.2	177.4	44.6	70.7	1.042
42580.0	42664.6	0.152	158.2	-11.4	-3.37	0.845	91.4	0.276	0.797	183.6	272.5	0.577D	1.017A	-0.48	1.223	74.7	40.6	-1.8	0.317
42664.6	42734.0	0.317	82.2	2.4	0.79	0.999	104.4	0.366	0.570	208.6	427.8	0.362	0.778A	3.69	1.687	106.5	176.9	17.8	0.341
4.13	8.23		-/+	41.9	0.0	42.4	0.0	0.308	1.402	331.4	-5.9	13.706	0.591	2.799	5.9	177.4	44.3	71.1	1.063
42590.0	42665.4	0.165	152.3	-7.9	-3.40	0.846	94.5	0.283	0.799	191.6	272.2	0.573D	1.025A	-1.05	1.224	74.4	42.0	-3.8	0.325
42665.4	42734.0	0.325	82.1	2.4	0.81	1.002	105.0	0.368	0.572	209.8	427.8	0.362	0.783A	3.67	1.689	106.6	176.6	17.5	0.344
4.29	8.33		-/+	40.5	0.0	43.6	0.0	0.310	1.402	332.0	-9.0	13.902	0.560	2.889	9.0	175.9	43.9	71.9	1.057
42600.0	42666.2	0.192	148.6	-3.9	-3.51	0.855	98.3	0.292	0.809	201.2	273.6	0.573D	1.045A	-1.63	1.231	74.0	42.7	-5.8	0.335
42666.2	42734.0	0.335	82.0	2.4	0.83	1.006	105.7	0.371	0.575	211.1	427.8	0.361	0.789A	3.64	1.692	106.8	176.2	17.2	0.348
4.44	8.43	171.2	-/+	40.1	1.0	44.9	0.0	0.313	1.402	331.5	-12.0	14.126	0.528	2.988	12.1	173.8	43.4	73.8	1.013
42610.0	42667.2	0.237	145.0	-0.3	-3.69	0.878	102.7	0.306	0.835	213.4	277.3	0.580D	1.090A	-2.25	1.247	73.8	42.1	-7.8	0.347
42667.2	42734.0	0.347	81.9	2.4	0.86	1.011	106.5	0.376	0.578	212.6	427.8	0.361	0.796A	3.60	1.695	107.0	175.7	16.8	0.352
5.30	8.57	668.9	-/+	41.0	3.7	46.4	0.0	0.317	1.402	329.4	-14.6	14.378	0.493	3.131	15.0	171.1	42.8	77.5	0.915

ARRIVAL DATE = 2442736.0

42540.0	42661.0	0.161	161.7	-16.5	-4.04	0.874	83.7	0.252	0.822	160.4	283.3	0.614D	1.029	2.03	1.238	76.9	30.6	8.8	0.281
42661.0	42736.0	0.281	85.8	4.3	1.26	0.982	101.3	0.353	0.560	202.5	432.3	0.362	0.757A	3.41	1.654	106.9	178.6	15.5	0.353
4.24	8.57	826.9	-/+	55.0	5.7	38.0	0.0	0.299	1.416	324.9	4.4	13.037	0.752	2.396	8.8	168.5	39.4	73.2	0.877
42550.0	42662.7	0.154	163.6	-16.3	-3.72	0.865	85.1	0.257	0.813	165.4	280.0	0.604D	1.023	1.31	1.233	76.4	33.6	5.5	0.288
42662.7	42736.0	0.288	85.4	4.3	1.28	0.985	102.0	0.356	0.561	203.8	432.2	0.362	0.761A	3.37	1.655	107.0	178.4	15.2	0.355
4.15	8.65	579.2	-/+	51.5	3.9	39.3	0.0	0.302	1.416	327.5	1.1	13.185	0.712	2.474	5.6	172.1	39.1	71.9	0.926
42560.0	42663.5	0.148	163.7	-15.6	-3.52	0.856	86.8	0.262	0.806	170.9	277.2	0.595D	1.018	0.67	1.229	75.9	36.4	2.7	0.296
42663.5	42736.0	0.296	85.0	4.3	1.31	0.988	102.7	0.359	0.563	205.0	432.2	0.361	0.765A	3.33	1.657	107.1	178.2	14.9	0.358
4.09	8.73	376.5	-/+	48.5	2.4	40.7	0.0	0.304	1.416	329.6	-2.0	13.341	0.674	2.557	4.3	175.0	38.8	71.1	0.968
42570.0	42664.3	0.144	161.6	-14.1	-3.40	0.850	88.9	0.268	0.801	176.9	274.9	0.587D	1.015	0.08	1.226	75.4	38.9	0.3	0.304
42664.3	42736.0	0.304	84.7	4.2	1.34	0.991	103.3	0.361	0.565	206.3	432.2	0.361	0.769A	3.29	1.659	107.2	177.9	14.6	0.361
4.07	8.81	229.1	-/+	45.9	1.4	41.9	0.0	0.307	1.416	331.2	-5.1	13.500	0.639	2.642	5.6	176.9	38.5	70.8	0.999
42580.0	42665.1	0.150	157.8	-11.5	-3.39	0.846	91.4	0.273	0.798	183.8	273.4	0.580D	1.017A	-0.48	1.224	75.0	40.9	-1.8	0.312
42665.1	42736.0	0.312	84.4	4.2	1.37	0.994	103.9	0.364	0.567	207.4	432.1	0.360	0.774A	3.25	1.661	107.3	177.7	14.3	0.364
4.12	8.90	157.0	-/+	43.9	1.0	42.1	0.0	0.309	1.416	332.3	-8.1	13.662	0.607	2.730	8.2	177.1	38.2	71.0	1.015
42590.0	42665.9	0.144	162.0	-7.9	-3.39	0.848	94.5	0.280	0.801	191.8	273.1	0.577D	1.025A	-1.05	1.226	74.6	42.3	-3.9	0.321
42665.9	42736.0	0.321	84.2	4.2	1.40	0.997	104.6	0.368	0.569	209.6	432.1	0.360	0.778A	3.21	1.663	107.4	177.5	14.0	0.368
4.27	8.99	200.2	-/+	42.7	1.2	44.4	0.0	0.312	1.416	332.7	-11.1	13.833	0.576	2.824	11.1	175.6	37.8	72.0	1.006

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
42600.0	42666.7	0.191	148.2	-3.9	-3.49	0.857	98.2	0.289	0.811	201.5	274.6	0.577D	1.045A	-1.62	1.233	74.3	42.9	-5.9	0.330
42666.7	42736.0	0.330	84.1	4.2	1.43	1.001	105.3	0.371	0.572	209.9	432.1	0.359	0.784A	3.16	1.665	107.6	177.2	13.6	0.371
4.62	9.10	420.7	-/+	42.4	2.5	45.6	0.0	0.315	1.416	332.0	-14.0	14.024	0.544	2.930	14.1	173.5	37.5	74.1	0.962
42610.0	42667.7	0.235	144.6	-0.2	-3.66	0.880	102.7	0.303	0.838	213.8	278.9	0.584D	1.091A	-2.24	1.248	74.1	42.3	-7.9	0.341
42667.7	42736.0	0.341	84.0	4.2	1.48	1.006	105.1	0.376	0.575	211.4	432.0	0.359	0.791A	3.10	1.668	107.8	176.8	13.2	0.376
5.27	9.24	932.9	-/+	43.3	5.3	47.2	0.0	0.319	1.416	329.9	-16.4	14.264	0.508	3.066	16.7	170.7	37.0	77.9	0.868
ARRIVAL DATE = 2442738.0																			
42550.0	42663.2	0.152	163.4	-16.5	-3.74	0.866	85.1	0.255	0.815	165.5	280.8	0.607D	1.022	1.32	1.234	76.6	34.0	5.6	0.285
42663.2	42738.0	0.285	88.0	5.9	1.74	0.980	101.5	0.357	0.558	202.4	436.1	0.359	0.758A	3.07	1.632	107.7	179.8	12.6	0.382
4.14	9.41	782.5	-/+	53.8	5.3	40.2	0.0	0.303	1.428	328.4	-0.6	13.112	0.731	2.436	6.4	171.7	34.0	71.7	0.886
42560.0	42664.1	0.147	163.3	-15.8	-3.53	0.858	86.9	0.260	0.808	170.9	278.0	0.598D	1.018	0.67	1.230	76.1	36.8	2.8	0.292
42664.1	42738.0	0.292	87.6	5.8	1.77	0.983	102.1	0.359	0.560	203.7	436.1	0.359	0.761A	3.02	1.634	107.8	179.6	12.3	0.385
4.08	9.49	593.5	-/+	50.8	3.9	41.5	0.0	0.306	1.428	330.5	-3.7	13.260	0.694	2.514	5.9	174.5	33.7	71.0	0.924
42570.0	42664.9	0.145	161.3	-14.2	-3.41	0.852	88.9	0.265	0.803	177.0	275.8	0.590D	1.015	0.08	1.227	75.6	39.2	0.3	0.300
42664.9	42738.0	0.300	87.3	5.8	1.80	0.985	102.8	0.362	0.562	204.9	436.0	0.359	0.765A	2.97	1.635	107.9	179.4	12.0	0.388
4.05	9.57	460.0	-/+	48.3	3.0	42.8	0.0	0.308	1.428	332.1	-6.9	13.412	0.658	2.595	7.5	176.4	33.5	70.8	0.951
42580.0	42665.6	0.149	157.4	-11.5	-3.36	0.848	91.5	0.270	0.800	183.9	274.4	0.584D	1.017A	-0.48	1.226	75.2	41.2	-1.9	0.308
42665.6	42738.0	0.308	87.0	5.7	1.83	0.989	103.4	0.365	0.564	206.1	436.0	0.358	0.769A	2.92	1.637	108.0	179.3	11.7	0.391
4.10	9.66	402.7	-/+	46.4	2.5	44.0	0.0	0.311	1.428	333.1	-9.7	13.568	0.625	2.679	9.9	176.6	33.2	71.2	0.964
42590.0	42666.4	0.152	152.5	-7.8	-3.38	0.850	94.5	0.277	0.803	192.0	274.2	0.581D	1.025A	-1.04	1.227	74.9	42.6	-3.9	0.316
42666.4	42738.0	0.316	86.7	5.7	1.87	0.992	104.0	0.368	0.566	207.3	435.9	0.358	0.774A	2.87	1.639	108.1	179.1	11.4	0.394
4.25	9.75	457.9	-/+	45.2	2.8	45.2	0.0	0.314	1.428	333.4	-12.6	13.720	0.594	2.767	12.6	175.3	32.9	72.2	0.953
42600.0	42667.2	0.189	147.8	-3.8	-3.47	0.859	99.2	0.285	0.814	201.9	275.8	0.582D	1.046A	-1.62	1.234	74.6	43.1	-5.9	0.325
42667.2	42738.0	0.325	86.5	5.7	1.90	0.996	104.7	0.371	0.568	208.5	435.9	0.357	0.779A	2.81	1.641	108.3	178.9	11.1	0.398
4.59	9.86	689.5	-/+	44.9	4.1	46.5	0.0	0.317	1.428	332.7	-15.3	13.912	0.562	2.868	15.3	173.2	32.6	74.4	0.910
ARRIVAL DATE = 2442740.0																			
42560.0	42664.6	0.145	163.0	-16.0	-3.54	0.859	86.9	0.257	0.810	171.0	279.0	0.602D	1.018	0.68	1.231	76.3	37.1	2.8	0.288
42664.6	42740.0	0.288	90.7	7.2	2.15	0.977	101.5	0.360	0.557	202.2	439.5	0.356	0.757A	2.77	1.613	108.4	181.6	10.3	0.414
4.06	10.31	849.9	-/+	53.5	5.7	42.4	0.0	0.308	1.438	331.4	-5.1	13.174	0.715	2.469	7.4	174.1	29.5	71.0	0.874
42570.0	42665.4	0.143	160.8	-14.4	-3.41	0.853	89.0	0.262	0.805	177.2	276.9	0.594D	1.015	0.08	1.228	75.9	39.6	0.3	0.295
42665.4	42740.0	0.295	90.3	7.1	2.18	0.980	102.2	0.363	0.558	203.4	439.4	0.356	0.761A	2.71	1.615	108.5	181.5	10.0	0.417
4.04	10.39	725.4	-/+	51.0	4.7	43.7	0.0	0.310	1.438	333.0	-8.0	13.319	0.680	2.545	8.9	175.9	29.3	70.9	0.899
42580.0	42666.2	0.147	156.9	-11.6	-3.35	0.850	91.5	0.267	0.803	184.1	275.5	0.588D	1.017A	-0.48	1.227	75.5	41.5	-1.9	0.303
42666.2	42740.0	0.303	89.9	7.0	2.22	0.983	102.8	0.365	0.560	204.6	439.4	0.355	0.765A	2.66	1.617	108.6	181.4	9.7	0.420
4.09	10.48	676.6	-/+	49.1	4.3	44.9	0.0	0.313	1.438	334.0	-10.9	13.466	0.647	2.624	11.2	176.1	29.1	71.3	0.909
42590.0	42667.0	0.161	151.9	-7.8	-3.36	0.852	94.5	0.273	0.805	192.3	275.4	0.586D	1.025A	-1.04	1.229	75.2	42.9	-4.0	0.310
42667.0	42740.0	0.310	89.6	7.0	2.25	0.986	103.4	0.368	0.562	205.7	439.3	0.355	0.769A	2.60	1.618	108.7	181.3	9.5	0.423
4.23	10.57	739.9	-/+	47.9	4.6	46.1	0.0	0.316	1.438	334.2	-13.6	13.620	0.615	2.707	13.7	174.9	28.9	72.4	0.899
42600.0	42667.8	0.187	147.3	-3.7	-3.44	0.862	98.2	0.281	0.817	202.2	277.1	0.587D	1.046A	-1.61	1.236	74.9	43.3	-6.0	0.319
42667.8	42740.0	0.319	89.4	6.9	2.29	0.989	104.1	0.371	0.564	206.9	439.3	0.354	0.773A	2.54	1.620	108.8	181.1	9.2	0.426
4.57	10.67	977.7	-/+	47.7	5.3	47.4	0.0	0.319	1.438	333.4	-16.2	13.792	0.583	2.801	16.2	172.7	28.6	74.6	0.858
ARRIVAL DATE = 2442742.0																			
42580.0	42666.3	0.145	156.3	-11.6	-3.34	0.852	91.5	0.263	0.805	184.3	276.7	0.593D	1.017A	-0.48	1.229	75.8	41.9	-1.9	0.297
42666.8	42742.0	0.297	93.3	8.2	2.55	0.976	102.1	0.366	0.556	202.8	442.4	0.352	0.760A	2.44	1.599	109.1	184.0	8.2	0.450
4.06	11.35	982.4	-/+	52.2	6.4	45.9	0.0	0.315	1.445	334.9	-11.8	13.359	0.670	2.566	12.1	175.6	25.6	71.4	0.853

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL LEG	I 1 DECL KAPPA	V 1 PSI 1 DELK	PSI 1 ECCEN DECLS	ECCEN COIST1	SMA THET1 COIST2	THET1 THET2 RAP	THET2 PERIH DECLP	PERIH APHEL VP	APHEL -A	I 2 E	V 2 INCL	PSI 2 LAMI	R A LAM2	DECL ETA	SPEED PERIC
							ARRIVAL DATE = 2443862.0											
43740.0	43820.2	0.187	241.5	-28.9	-1.82	0.805	88.7	0.344	0.753	177.6	256.2	0.494D	1.012	-3.24	1.199	70.0	100.8	-8.9	0.411
43820.2	43862.0	0.411	128.3	9.5	3.67	1.006	109.8	0.423	0.570	213.6	321.2	0.329D	0.811A	1.44	1.981	78.7	238.5	3.8	0.746
4.57	20.00	742.1	-/-	32.5	3.5	93.5	0.0	0.269	0.896	22.3	-32.7	15.802	0.351	3.990	32.8	168.5	162.9	74.3	0.904
43750.0	43821.1	0.194	238.7	-28.0	-1.82	0.799	91.7	0.357	0.745	183.1	253.6	0.479D	1.011A	-3.54	1.193	69.2	103.6	-9.3	0.427
43821.1	43862.0	0.427	127.9	8.1	3.64	1.016	110.9	0.429	0.577	215.5	321.7	0.329D	0.824A	1.54	1.986	78.8	238.2	4.0	0.748
4.66	20.05	536.3	-/-	29.8	2.4	95.0	0.0	0.269	0.896	23.8	-36.1	16.177	0.325	4.230	36.1	167.3	162.5	74.8	0.941
43760.0	43822.1	0.210	234.1	-26.6	-1.85	0.797	95.5	0.371	0.741	189.5	251.8	0.466D	1.015A	-3.83	1.191	68.3	106.1	-9.6	0.445
43822.1	43862.0	0.445	127.5	7.8	3.62	1.027	112.1	0.435	0.584	217.6	322.2	0.330D	0.838A	1.64	1.991	78.8	237.8	4.3	0.750
4.89	20.11	417.3	-/-	27.5	1.8	96.5	0.0	0.269	0.896	24.9	-39.4	16.598	0.300	4.505	39.4	166.5	162.1	75.9	0.963
43770.0	43823.1	0.241	228.7	-24.6	-1.91	0.805	100.3	0.386	0.745	197.2	251.5	0.457D	1.033A	-4.13	1.194	67.3	108.0	-9.8	0.466
43823.1	43862.0	0.466	127.1	7.4	3.59	1.041	113.3	0.443	0.594	219.9	322.9	0.330D	0.857A	1.75	1.998	78.8	237.3	4.6	0.752
5.37	20.18	444.9	-/-	25.7	1.8	98.2	0.0	0.270	0.896	25.2	-42.3	17.101	0.273	4.844	42.4	166.2	161.5	77.5	0.957
43780.0	43824.3	0.295	223.7	-22.3	-1.99	0.831	106.2	0.406	0.766	207.1	253.6	0.455D	1.077A	-4.44	1.209	66.2	108.9	-10.0	0.493
43824.3	43862.0	0.493	126.7	7.0	3.56	1.059	114.9	0.455	0.607	222.8	323.3	0.331D	0.883A	1.87	2.008	78.9	236.6	4.9	0.755
6.31	20.26	722.4	-/-	24.6	2.8	100.2	0.0	0.271	0.896	24.4	-43.9	17.761	0.244	5.304	44.0	166.7	160.8	79.8	0.903
							ARRIVAL DATE = 2443864.0											
43700.0	43816.5	0.194	233.4	-29.1	-2.22	0.848	81.7	0.303	0.801	159.9	270.9	0.558D	1.044	-1.89	1.231	73.2	87.2	-6.4	0.350
43816.5	43864.0	0.350	125.7	10.0	3.62	1.005	106.1	0.380	0.570	210.9	333.8	0.353D	0.786A	1.13	1.935	82.9	241.5	3.4	0.628
4.66	16.52	886.5	-/-	41.6	4.9	87.6	0.0	0.272	0.942	14.5	-23.7	14.446	0.484	3.171	23.7	173.6	156.7	74.5	0.877
43710.0	43817.6	0.190	237.8	-29.3	-2.05	0.837	82.9	0.312	0.788	163.9	267.0	0.542D	1.034	-2.28	1.223	72.4	90.9	-7.3	0.364
43817.6	43864.0	0.364	125.1	9.5	3.55	1.013	107.2	0.385	0.575	212.9	334.2	0.354D	0.796A	1.25	1.939	82.9	241.1	3.8	0.629
4.61	16.55	613.7	-/-	38.0	3.2	89.3	0.0	0.271	0.942	16.7	-26.7	14.757	0.446	3.352	26.7	172.5	156.3	74.5	0.926
43720.0	43818.5	0.187	240.8	-29.4	-1.93	0.826	84.5	0.321	0.776	168.1	263.3	0.527D	1.025	-2.63	1.215	71.7	94.5	-8.0	0.379
43818.5	43864.0	0.379	124.6	9.0	3.49	1.021	108.2	0.390	0.580	215.0	334.6	0.354D	0.807A	1.36	1.943	83.0	240.7	4.2	0.630
4.57	16.57	345.2	-/-	34.5	1.8	90.9	0.0	0.270	0.942	18.8	-29.9	15.078	0.413	3.544	29.9	171.2	155.8	74.5	0.978
43730.0	43819.5	0.185	242.2	-29.3	-1.85	0.815	86.4	0.332	0.764	172.6	259.7	0.511D	1.018	-2.94	1.207	70.9	97.8	-8.6	0.394
43819.5	43864.0	0.393	124.2	9.5	3.44	1.029	109.2	0.396	0.586	216.9	335.1	0.354D	0.818A	1.46	1.948	83.0	240.3	4.5	0.631
4.54	16.60	93.9	-/-	31.4	0.5	92.3	0.0	0.269	0.942	20.7	-33.3	15.411	0.382	3.746	33.3	169.9	155.4	74.7	1.030
43740.0	43820.4	0.187	241.5	-28.9	-1.81	0.806	88.7	0.343	0.754	177.6	256.5	0.495D	1.012	-3.24	1.200	70.1	100.9	-9.0	0.409
43820.4	43864.0	0.409	123.9	8.1	3.40	1.039	110.2	0.402	0.592	218.9	335.6	0.354D	0.831A	1.56	1.952	83.1	239.8	4.8	0.631
4.56	16.62		-/-	28.6	0.0	93.8	0.0	0.269	0.942	22.1	-37.0	15.674	0.354	4.046	37.0	168.6	154.8	75.5	1.079
43750.0	43821.3	0.193	238.7	-28.0	-1.80	0.800	91.7	0.355	0.746	183.1	253.9	0.481D	1.011A	-3.53	1.194	69.3	103.7	-9.3	0.425
43821.3	43864.0	0.425	123.7	7.7	3.36	1.048	111.2	0.409	0.600	220.9	336.2	0.355D	0.845A	1.66	1.958	83.1	239.3	5.1	0.632
4.65	16.65		-/-	26.2	0.0	95.2	0.0	0.269	0.942	23.0	-40.9	15.940	0.328	4.417	40.9	167.4	154.3	76.7	1.120
43760.0	43822.2	0.209	234.1	-26.5	-1.83	0.798	95.5	0.369	0.742	189.5	252.1	0.468D	1.015A	-3.82	1.191	68.4	106.2	-9.6	0.443
43822.2	43864.0	0.443	123.5	7.4	3.32	1.059	112.2	0.416	0.608	223.0	336.8	0.355D	0.861A	1.75	1.963	83.2	238.8	5.4	0.633
4.88	16.68		-/-	24.2	0.0	96.7	0.0	0.269	0.942	23.7	-44.8	16.310	0.302	4.777	44.8	166.6	153.7	78.0	1.141
43770.0	43823.2	0.240	228.6	-24.5	-1.89	0.806	100.2	0.385	0.746	197.3	251.8	0.459D	1.033A	-4.12	1.195	67.4	108.0	-9.8	0.464
43823.2	43864.0	0.464	123.3	7.0	3.28	1.073	113.4	0.425	0.619	225.4	337.5	0.355D	0.882A	1.85	1.971	83.3	238.0	5.7	0.634
5.35	16.71		-/-	22.7	0.0	98.4	0.0	0.270	0.942	24.1	-48.1	16.851	0.276	5.090	48.2	166.3	152.9	79.6	1.127
43780.0	43824.5	0.294	223.6	-22.2	-1.96	0.832	106.1	0.405	0.767	207.2	253.9	0.457D	1.077A	-4.43	1.210	66.3	109.0	-10.0	0.491
43824.5	43864.0	0.490	123.2	6.5	3.23	1.091	114.8	0.438	0.633	228.3	338.4	0.356D	0.911A	1.98	1.980	83.5	237.1	6.1	0.636
6.28	16.76		-/-	21.8	0.0	100.4	0.0	0.271	0.942	24.0	-49.7	17.687	0.246	5.291	49.8	166.8	151.9	81.2	1.057
43790.0	43826.1	0.380	219.6	-20.1	-2.03	0.890	113.1	0.437	0.826	220.7	260.2	0.465D	1.187A	-4.71	1.248	65.1	108.4	-10.1	0.529
43826.1	43864.0	0.529	123.1	6.0	3.18	1.117	116.7	0.458	0.657	232.2	339.8	0.357D	0.958A	2.13	1.995	83.7	235.7	6.6	0.639
8.00	16.84	675.6	-/-	21.8	2.5	103.0	0.0	0.273	0.942	21.7	-47.8	18.661	0.212	5.959	48.0	168.5	150.4	84.2	0.909
							ARRIVAL DATE = 2443866.0											
43670.0	43813.2	0.207	214.6	-29.3	-3.24	0.880	79.1	0.282	0.837	148.8	283.1	0.601D	1.073	-0.22	1.252	75.5	75.3	-0.9	0.308
43813.2	43866.0	0.307	123.5	11.9	3.71	1.006	103.5	0.349	0.571	208.4	345.4	0.372D	0.771A	0.81	1.892	86.2	243.5	2.9	0.533
4.84	13.74	907.1	-/-	49.5	5.7	82.3	0.0	0.278	0.986	7.9	-15.6	13.565	0.626	2.677	16.5	172.9	150.0	75.0	0.868
43680.0	43814.4	0.202	221.7	-28.5	-2.78	0.870	79.8	0.288	0.825	152.3	279.1	0.587D	1.063	-0.90	1.246	74.8	79.5	-3.4	0.321
43814.4	43866.0	0.321	122.8	11.0	3.58	1.013	104.5	0.353	0.576	210.7	345.8	0.372D	0.779A	0.98	1.895	86.3	243.0	3.5	0.533
4.77	13.76	664.4	-/-	45.4	4.0	84.2	0.0	0.276	0.986	10.2	-19.0	13.838	0.575	2.827	19.3	174.2	149.5	74.9	0.914
43690.0	43815.6	0.198	228.0	-28.8	-2.45	0.859	80.7	0.295	0.813	156.0	275.1	0.573D	1.053	-1.44	1.239	74.0	83.5	-5.1	0.335
43815.6	43866.0	0.335	122.2	10.2	3.47	1.020	105.6	0.359	0.581	213.0	346.2	0.372D	0.789A	1.14	1.899	86.4	242.6	4.1	0.534
4.71	13.78	414.5	-/-	41.5	2.4	86.1	0.0	0.274	0.986	12.5	-22.2	14.127	0.528	2.988	22.3	174.3	149.0	74.8	0.963
43700.0	43816.6	0.193	233.4	-29.1	-2.22	0.848	81.7	0.303	0.801	159.9	271.1	0.558D	1.044	-1.89	1.231	73.2	87.3	-6.4	0.349
43816.6	43866.0	0.349	121.7	9.6	3.38	1.028	106.6	0.364	0.586	215.1	346.6	0.373D	0.799A	1.28	1.903	86.4	242.1	4.6	0.534
4.65	13.79	163.3	-/-	37.8	0.9	87.8	0.0	0.272	0.986	14.7	-25.4	14.428	0.486	3.160	25.5	173.6	148.4	74.7	1.015
43710.0	43817.6	0.190	237.8	-29.3	-2.04	0.837	83.0	0.311	0.789	163.9	267.2	0.543D	1.034	-2.28	1.224	72.5	91.0	-7.3	0.364
43817.6	43866.0	0.363	121.3	9.0	3.30	1.036	107.6	0.369	0.591	217.2	347.1	0.373D	0.810A	1.40	1.907	86.5	241.6	5.0	0.535
4.60	13.80		-/-	34.4	0.0	89.4	0.0	0.271	0.986	16.6	-28.7	14.677	0.448	3.386	28.7	172.5	147.8	75.0	1.070
43720.0	43818.6	0.187	240.8	-29.4	-1.92	0.826	84.5	0.321	0.776	168.1	263.4	0.527D	1.025	-2.63	1.216	71.7	94.5	-8.0	0.378
43818.6	43866.0	0.378	121.0	8.5	3.22	1.044	108.5	0.375	0.597	219.2	347.6	0.373D	0.821A	1.52	1.912	86.6	241.0	5.4	0.535
4.56	13.81		-/-	31.2	0.0	91.0	0.0	0.270	0.986	17.9	-32.3	14.830	0.414	3.722	32.3	171.2	147.2	75.7	1.128
43730.0	43819.5	0.185	242.1	-29.3	-1.84	0.816	86.4	0.331	0.765	172.6	259.9	0.512D	1.018	-2.94	1.208	70.9	97.8	-8.6	0.393
43819.5	43866.0	0.393	120.8	8.0	3.16	1.053	109.4	0.382	0.603	221.2	348.1	0.373D	0.834A	1.62	1.916	86.7	240.4	5.8	0.536
4.54	13.83		-/-	28.3	0.0	92.5	0.0	0.269	0.986	19.1	-36.2	15.015	0.384	4.093	36.2	169.9	146.6	76.6	1.187
43740.0	43820.4	0.186	241.5	-28.8	-1.80	0.807	88.7	0.342	0.754	177.6	256.7	0.496D	1.012	-3.24	1.200	70.1	100.9	-9.0	0.408
43820.4	43866.0	0.408	120.7	7.6	3.10	1.062	110.3	0.388	0.610	223.1	348.6	0.373D	0.847A	1.72	1.921	86.8	239.8	6.2	0.536
4.55	13.84		-/-	25.7	0.0	93.9	0.0	0.269	0.986	20.2	-40.4	15.243	0.356	4.494	40.4	168.6	145.9	77.6	1.242

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL LEG KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COIST1	SMA SMA COIST2	THETI THETI RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
43750.0	43821.4	0.193	238.6	-27.9	-1.79	0.800	91.7	0.355	0.746	183.1	254.0	0.482D	1.011A	-3.53	1.194	69.3	103.8	-9.3	0.424
43821.4	43866.0	0.424	120.6	7.2	3.05	1.072	111.3	0.396	0.618	225.1	349.1	0.373D	0.862A	1.81	1.926	86.9	239.1	6.5	0.537
4.64	13.86		-/-	23.5	0.0	95.4	0.0	0.269	0.986	21.1	-44.8	15.536	0.329	4.908	44.9	167.5	145.2	78.9	1.286
43760.0	43822.3	0.209	234.0	-26.5	-1.81	0.799	95.5	0.368	0.742	189.5	252.2	0.469D	1.016A	-3.82	1.192	68.4	106.2	-9.6	0.442
43822.3	43866.0	0.442	120.5	6.9	3.10	1.083	112.2	0.404	0.627	227.2	349.7	0.374D	0.880A	1.91	1.932	87.0	238.3	6.9	0.537
4.87	12.88		-/-	21.7	0.0	96.9	0.0	0.269	0.986	21.8	-49.3	15.929	0.303	5.303	49.3	166.6	144.4	80.3	1.305
43770.0	43823.3	0.240	228.6	-24.5	-1.83	0.807	100.2	0.384	0.746	197.3	251.9	0.460D	1.033A	-4.12	1.195	67.5	108.1	-9.9	0.463
43823.3	43866.0	0.462	120.5	6.4	2.94	1.096	113.3	0.414	0.638	229.6	350.4	0.374D	0.902A	2.01	1.940	87.2	237.4	7.3	0.538
5.35	13.00		-/-	20.5	0.0	98.5	0.0	0.270	0.986	22.0	-52.8	16.486	0.277	5.630	52.9	166.3	143.4	81.9	1.282
43780.0	43824.4	0.293	223.5	-22.2	-1.85	0.823	106.1	0.404	0.767	207.3	254.1	0.458D	1.077A	-4.42	1.211	66.4	109.0	-10.1	0.489
43824.4	43866.0	0.489	120.6	6.0	2.88	1.113	114.7	0.428	0.654	232.5	351.3	0.374D	0.934A	2.13	1.949	87.4	236.1	7.7	0.540
6.27	12.94		-/-	19.3	0.0	100.5	0.0	0.271	0.986	23.0	-54.3	17.323	0.248	5.827	54.4	166.9	142.1	83.4	1.195
43790.0	43826.3	0.379	219.6	-20.0	-2.01	0.850	113.0	0.435	0.827	220.8	260.5	0.467D	1.187A	-4.69	1.249	65.2	108.5	-10.1	0.527
43826.3	43866.0	0.527	120.8	5.5	2.82	1.139	116.5	0.449	0.679	236.3	352.5	0.374D	0.985A	2.28	1.964	87.7	234.3	8.3	0.542
7.08	14.32	115.4	-/-	19.9	0.4	103.2	0.0	0.273	0.986	21.3	-51.8	18.611	0.213	5.922	51.9	168.6	140.2	84.9	1.023

ARRIVAL DATE = 2443868.0

43640.0	43810.7	0.235	197.1	-32.3	-6.78	0.912	77.7	0.265	0.871	139.4	296.6	0.641D	1.102	4.02	1.270	78.1	63.1	18.3	0.277
43810.7	43868.0	0.277	122.0	14.4	4.01	1.008	101.4	0.326	0.573	206.0	356.1	0.387D	0.760A	0.37	1.851	89.0	244.3	1.5	0.456
5.27	11.51	919.3	-/-	56.5	6.4	77.5	0.0	0.286	1.029	358.5	2.9	12.972	0.770	2.363	19.1	156.8	142.6	79.0	0.858
43650.0	43810.9	0.221	198.0	-30.3	-4.91	0.901	78.0	0.271	0.860	141.9	291.6	0.627D	1.093	1.91	1.264	77.1	66.8	8.3	0.283
43810.9	43869.0	0.283	121.5	13.6	3.37	1.011	102.0	0.328	0.575	207.3	356.2	0.387D	0.763A	0.53	1.853	89.1	244.0	2.1	0.456
5.05	11.57	749.6	-/-	53.9	5.1	78.6	0.0	0.284	1.029	2.6	-6.3	13.088	0.738	2.423	13.6	165.6	142.3	76.0	0.892
43660.0	43812.1	0.213	206.8	-28.4	-3.39	0.861	78.5	0.276	0.848	145.3	287.3	0.614D	1.083	0.66	1.258	76.3	71.1	2.7	0.294
43812.1	43869.0	0.294	120.7	12.5	3.67	1.017	102.9	0.332	0.579	209.4	356.5	0.387D	0.770A	0.76	1.855	89.1	243.6	3.1	0.456
4.93	11.53	552.0	-/-	50.1	3.6	80.5	0.0	0.281	1.029	5.5	-11.7	13.301	0.684	2.535	14.2	170.2	141.9	75.3	0.932
43670.0	43813.3	0.207	214.6	-28.3	-3.23	0.880	79.1	0.282	0.837	148.8	283.2	0.601D	1.073	-0.22	1.252	75.5	75.4	-0.9	0.307
43813.3	43868.0	0.307	120.1	11.4	3.49	1.023	103.9	0.337	0.583	211.7	356.9	0.387D	0.779A	0.98	1.859	89.2	243.1	4.0	0.457
4.84	11.55	332.4	-/-	46.1	2.1	82.4	0.0	0.278	1.029	9.0	-15.9	13.553	0.628	2.671	16.8	172.9	141.3	75.0	0.978
43680.0	43814.5	0.202	221.7	-28.5	-2.78	0.870	79.9	0.288	0.825	152.3	279.2	0.588D	1.063	-0.90	1.246	74.8	79.5	-3.4	0.321
43814.5	43868.0	0.320	119.5	10.4	3.24	1.030	104.9	0.342	0.587	214.0	357.3	0.387D	0.788A	1.17	1.862	89.3	242.5	4.8	0.457
4.77	11.56	103.2	-/-	42.1	0.6	84.2	0.0	0.275	1.029	10.4	-19.5	13.828	0.577	2.821	19.8	174.1	140.6	74.9	1.027
43690.0	43815.6	0.197	226.0	-28.8	-2.45	0.859	80.7	0.295	0.813	156.0	275.1	0.574D	1.053	-1.44	1.239	74.0	83.5	-5.1	0.335
43815.6	43868.0	0.334	119.1	9.6	3.20	1.037	105.9	0.347	0.592	216.3	357.7	0.387D	0.798A	1.34	1.866	89.4	241.9	5.5	0.458
4.71	11.57		-/-	38.4	0.0	86.2	0.0	0.273	1.029	12.2	-22.9	14.017	0.529	3.041	23.0	174.2	139.9	75.2	1.081
43700.0	43816.7	0.193	233.4	-29.1	-2.21	0.848	81.7	0.303	0.801	159.9	271.2	0.559D	1.044	-1.89	1.231	73.3	87.4	-6.4	0.349
43816.7	43868.0	0.349	118.8	8.9	3.09	1.045	106.9	0.353	0.598	219.4	358.1	0.387D	0.809A	1.49	1.870	89.5	241.2	5.1	0.458
4.65	11.58		-/-	34.9	0.0	87.9	0.0	0.272	1.029	13.7	-26.4	14.149	0.487	3.336	26.4	173.6	139.2	75.9	1.138
43710.0	43817.7	0.190	237.8	-29.3	-2.04	0.837	83.0	0.311	0.789	163.9	267.2	0.543D	1.034	-2.28	1.224	72.5	91.0	-7.3	0.363
43817.7	43868.0	0.363	118.6	8.3	2.93	1.053	107.8	0.359	0.604	220.5	358.6	0.387D	0.820A	1.62	1.875	89.6	240.5	6.6	0.459
4.60	11.60		-/-	31.5	0.0	89.5	0.0	0.271	1.029	15.1	-29.9	14.300	0.449	3.671	29.9	172.5	138.4	76.5	1.200
43720.0	43818.7	0.186	240.8	-29.4	-1.92	0.826	84.5	0.320	0.777	169.1	263.5	0.528D	1.025	-2.63	1.216	71.7	94.6	-8.0	0.378
43818.7	43868.0	0.378	118.5	7.7	2.90	1.051	108.7	0.366	0.610	222.5	359.0	0.387D	0.833A	1.74	1.879	89.7	239.8	7.1	0.459
4.56	11.61		-/-	28.6	0.0	91.1	0.0	0.270	1.029	16.4	-33.8	14.475	0.415	4.048	33.8	171.2	137.6	77.3	1.266
43730.0	43819.6	0.195	242.1	-29.3	-1.84	0.816	86.4	0.331	0.765	172.6	259.9	0.512D	1.018	-2.94	1.208	70.9	97.9	-8.6	0.393
43819.6	43868.0	0.392	118.4	7.3	2.83	1.059	109.6	0.373	0.616	224.5	359.5	0.387D	0.846A	1.84	1.884	89.9	239.0	7.6	0.460
4.54	11.63		-/-	25.9	0.0	92.5	0.0	0.269	1.029	17.6	-38.0	14.678	0.385	4.464	38.0	169.9	136.8	78.2	1.333
43740.0	43820.5	0.186	241.5	-28.8	-1.80	0.807	88.8	0.342	0.755	177.6	256.8	0.497D	1.012	-3.24	1.200	70.1	101.0	-9.0	0.408
43820.5	43868.0	0.407	118.4	6.8	2.76	1.078	110.4	0.380	0.624	226.4	360.0	0.387D	0.860A	1.94	1.889	90.0	238.2	8.0	0.460
4.55	11.64		-/-	23.5	0.0	94.0	0.0	0.269	1.029	18.7	-42.6	14.924	0.357	4.913	42.6	168.6	136.0	79.2	1.395
43750.0	43821.4	0.192	238.6	-27.9	-1.79	0.800	91.7	0.354	0.746	183.1	254.1	0.482D	1.011A	-3.53	1.195	69.3	103.8	-9.3	0.424
43821.4	43968.0	0.424	118.4	6.5	2.69	1.088	111.3	0.388	0.632	228.4	360.5	0.387	0.876A	2.04	1.894	90.1	237.3	8.4	0.461
4.64	11.66		-/-	21.5	0.0	95.4	0.0	0.269	1.029	19.6	-47.5	15.232	0.330	5.370	47.6	167.5	135.0	80.5	1.442
43760.0	43822.3	0.208	234.0	-26.5	-1.81	0.799	95.5	0.368	0.743	189.6	252.4	0.470D	1.016A	-3.82	1.192	68.5	106.3	-9.6	0.441
43822.3	43869.0	0.441	118.5	6.1	2.63	1.099	112.2	0.396	0.641	230.4	361.0	0.387	0.895A	2.13	1.900	90.3	236.3	8.8	0.462
4.86	11.69		-/-	19.9	0.0	97.0	0.0	0.269	1.029	20.1	-52.3	15.639	0.304	5.794	52.4	166.6	134.0	82.0	1.460
43770.0	43823.4	0.235	228.6	-24.4	-1.87	0.807	100.2	0.383	0.747	197.3	252.1	0.461D	1.033A	-4.11	1.195	67.6	108.1	-9.9	0.462
43823.4	43868.0	0.461	118.6	5.7	2.57	1.112	113.3	0.407	0.653	232.7	361.7	0.387	0.918A	2.23	1.907	90.5	235.1	9.2	0.463
5.34	11.73		-/-	18.8	0.0	98.6	0.0	0.270	1.029	20.3	-56.1	16.203	0.278	6.134	56.2	166.3	132.8	83.5	1.428
43780.0	43824.7	0.292	223.5	-22.2	-1.94	0.833	106.0	0.402	0.768	207.3	254.3	0.459D	1.077A	-4.41	1.211	66.5	109.0	-10.1	0.488
43824.7	43868.0	0.488	118.9	5.3	2.50	1.129	114.6	0.422	0.669	235.5	362.5	0.387	0.951A	2.34	1.917	90.7	233.5	9.7	0.465
6.26	11.79		-/-	18.2	0.0	100.7	0.0	0.271	1.029	20.2	-57.5	17.037	0.249	6.322	57.6	166.9	131.2	84.9	1.325
43790.0	43826.3	0.378	219.5	-20.0	-1.99	0.891	112.9	0.434	0.827	221.0	260.7	0.468D	1.186A	-4.67	1.249	65.3	108.5	-10.1	0.525
43826.3	43868.0	0.525	119.3	4.8	2.42	1.154	116.3	0.444	0.695	239.2	363.5	0.387	1.004A	2.48	1.932	91.1	231.3	10.3	0.469
7.95	11.90		-/-	18.4	0.0	103.3	0.0	0.273	1.029	20.2	-54.2	18.369	0.215	6.255	54.3	168.6	128.9	86.0	1.130

ARRIVAL DATE = 2443870.0

43640.0	43810.3	0.235	187.1	-32.4	-6.82	0.912	77.7	0.264	0.871	138.4	296.8	0.641D	1.102	4.05	1.270	78.1	63.1	18.5	0.277
43810.3	43870.0	0.277	119.1	14.0	3.85	1.020	101.9	0.316	0.581	208.5	366.3	0.397	0.765A	0.52	1.818	91.5	242.7	2.4	0.395
5.27	9.78	510.8	-/-	53.7	3.6	77.6	0.0	0.286	1.070	358.2	4.2	12.964	0.773	2.359	18.9	156.7	133.2	79.4	0.938
43650.0	43811.0	0.220	198.0	-29.4	-4.92	0.902	78.0	0.271	0.860	141.8	291.7	0.627D	1.092	1.92	1.264	77.1	66.9	8.4	0.283
43811.0	43870.0	0.283	118.7	13.1	3.67	1.023	102.4	0.319	0.583	209.8	366.4	0.397	0.769A	0.71	1.820	91.6	242.4	3.3	0.395
5.04	9.79	320.2	-/-	51.0	2.2	78.7	0.0	0.284	1.070	2.6	-5.6	13.077	0.741	2.418	13.1	165.5	132.9	76.2	0.978

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
43660.0	43812.1	0.212	206.8	-28.4	-3.89	0.891	78.5	0.276	0.849	145.3	287.4	0.614D	1.083	0.66	1.258	76.3	71.2	2.8	0.294
43812.1	43870.0	0.294	118.1	11.7	3.42	1.029	103.3	0.323	0.587	212.0	366.7	0.397	0.777A	0.99	1.823	91.6	241.8	4.6	0.396
4.92	9.80	121.2	-/-	47.4	0.8	80.6	0.0	0.281	1.070	5.5	-11.2	13.290	0.686	2.530	13.7	170.2	132.2	75.4	1.023
43670.0	43813.4	0.207	214.6	-28.3	-3.23	0.881	79.1	0.282	0.837	148.8	283.3	0.602D	1.073	-0.22	1.252	75.6	75.4	-0.9	0.307
43813.4	43870.0	0.306	117.6	10.5	3.19	1.035	104.2	0.328	0.591	214.3	367.1	0.397	0.785A	1.24	1.826	91.8	241.1	5.7	0.397
4.84	9.83		-/-	43.5	0.0	82.6	0.0	0.278	1.070	7.8	-15.5	13.465	0.631	2.700	16.3	172.8	131.5	75.4	1.072
43680.0	43814.5	0.202	221.7	-28.5	-2.78	0.870	79.8	0.288	0.826	152.3	279.3	0.588D	1.063	-0.90	1.246	74.8	79.6	-3.4	0.320
43814.5	43870.0	0.320	117.2	9.5	3.00	1.042	105.2	0.334	0.596	216.6	367.5	0.397	0.795A	1.46	1.830	91.9	240.4	6.7	0.398
4.77	9.85		-/-	39.7	0.0	84.5	0.0	0.275	1.070	9.4	-19.2	13.569	0.578	2.948	19.5	174.1	130.6	75.9	1.127
43690.0	43815.7	0.197	228.0	-28.8	-2.45	0.859	80.7	0.295	0.814	156.0	275.2	0.574D	1.053	-1.44	1.239	74.1	83.6	-5.1	0.334
43815.7	43870.0	0.334	117.0	8.6	2.84	1.049	106.1	0.340	0.601	218.8	367.9	0.397	0.806A	1.65	1.834	92.0	239.6	7.6	0.398
4.70	9.87		-/-	36.0	0.0	86.3	0.0	0.273	1.070	11.0	-22.7	13.694	0.531	3.234	22.8	174.2	129.7	76.5	1.186
43700.0	43816.7	0.192	233.4	-29.1	-2.21	0.848	81.7	0.302	0.801	159.9	271.3	0.559D	1.044	-1.89	1.232	73.3	87.4	-6.4	0.348
43816.7	43870.0	0.348	116.8	7.9	2.70	1.057	107.1	0.346	0.607	220.9	368.3	0.397	0.817A	1.80	1.838	92.1	238.7	8.3	0.399
4.65	9.90		-/-	32.6	0.0	88.0	0.0	0.272	1.070	12.5	-26.3	13.840	0.489	3.560	26.3	173.6	128.8	77.0	1.251
43710.0	43817.9	0.189	237.8	-29.3	-2.04	0.837	83.0	0.311	0.789	163.9	267.4	0.544D	1.034	-2.28	1.224	72.5	91.1	-7.4	0.363
43817.9	43870.0	0.362	116.8	7.3	2.59	1.064	107.9	0.353	0.613	222.9	368.7	0.397	0.829A	1.94	1.842	92.3	237.8	9.0	0.400
4.60	9.92		-/-	29.5	0.0	89.6	0.0	0.271	1.070	13.9	-30.0	14.003	0.451	3.931	30.0	172.5	127.9	77.7	1.321
43720.0	43818.7	0.186	240.8	-29.4	-1.91	0.826	84.5	0.320	0.777	168.1	263.6	0.528D	1.025	-2.63	1.216	71.8	94.6	-8.1	0.377
43818.7	43870.0	0.377	116.7	6.7	2.49	1.073	108.8	0.359	0.619	224.9	369.1	0.397	0.842A	2.06	1.847	92.4	236.9	9.5	0.401
4.55	9.95		-/-	26.6	0.0	91.2	0.0	0.270	1.070	15.2	-34.1	14.188	0.417	4.352	34.1	171.2	126.9	78.4	1.397
43730.0	43819.7	0.184	242.1	-29.2	-1.83	0.816	86.4	0.330	0.765	172.6	260.1	0.513D	1.018	-2.94	1.208	71.0	97.9	-8.6	0.392
43819.7	43870.0	0.392	116.8	6.3	2.40	1.081	109.6	0.367	0.626	226.8	369.6	0.396	0.855A	2.17	1.851	92.6	236.0	10.0	0.402
4.53	9.98		-/-	24.0	0.0	92.7	0.0	0.269	1.070	16.4	-38.5	14.401	0.386	4.818	38.6	169.9	125.9	79.3	1.474
43740.0	43820.6	0.185	241.4	-28.8	-1.79	0.807	88.8	0.341	0.755	177.6	256.9	0.497D	1.012	-3.24	1.201	70.2	101.1	-9.0	0.407
43820.6	43870.0	0.407	116.9	5.8	2.33	1.090	110.5	0.374	0.633	228.7	370.0	0.396	0.870A	2.26	1.856	92.7	235.0	10.5	0.403
4.54	10.02		-/-	21.7	0.0	94.1	0.0	0.269	1.070	17.5	-43.5	14.655	0.358	5.317	43.5	168.6	124.8	80.3	1.545
43750.0	43821.5	0.182	238.6	-27.9	-1.78	0.801	91.7	0.353	0.747	183.2	254.3	0.483D	1.011A	-3.52	1.195	69.4	103.9	-9.4	0.423
43821.5	43870.0	0.423	117.0	5.5	2.25	1.099	111.3	0.382	0.641	230.7	370.4	0.396	0.887A	2.36	1.862	92.9	233.9	10.9	0.405
4.63	10.06		-/-	19.8	0.0	95.6	0.0	0.269	1.070	18.3	-48.7	14.971	0.332	5.824	48.8	167.5	123.7	81.7	1.600
43760.0	43822.4	0.208	233.9	-26.4	-1.80	0.800	95.5	0.367	0.743	189.6	252.5	0.471D	1.016A	-3.81	1.192	68.5	106.3	-9.7	0.440
43822.4	43870.0	0.440	117.2	5.1	2.19	1.109	112.2	0.392	0.651	232.6	370.9	0.396	0.906A	2.45	1.868	93.1	232.7	11.3	0.407
4.85	10.11		-/-	18.3	0.0	97.1	0.0	0.269	1.070	19.7	-53.8	15.382	0.306	6.283	53.9	166.7	122.5	83.2	1.617
43770.0	43823.5	0.238	228.5	-24.4	-1.85	0.808	100.2	0.382	0.748	197.4	252.3	0.462D	1.033A	-4.10	1.196	67.6	108.2	-9.9	0.460
43823.5	43870.0	0.460	117.5	4.8	2.12	1.122	113.2	0.403	0.663	234.9	371.4	0.396	0.929A	2.54	1.875	93.3	231.3	11.7	0.409
5.32	10.17		-/-	17.3	0.0	98.8	0.0	0.270	1.070	19.7	-57.7	15.948	0.280	6.637	57.9	166.4	121.1	84.7	1.578
43780.0	43824.8	0.291	223.4	-22.1	-1.92	0.834	106.0	0.401	0.769	207.4	254.5	0.461D	1.077A	-4.39	1.212	66.6	109.1	-10.1	0.486
43824.8	43870.0	0.486	117.8	4.4	2.04	1.138	114.4	0.418	0.679	237.6	372.1	0.395	0.963A	2.65	1.885	93.6	229.4	12.2	0.412
6.24	10.27		-/-	16.9	0.0	100.8	0.0	0.271	1.070	19.7	-58.9	16.773	0.251	6.810	59.1	167.0	119.2	85.9	1.459
43790.0	43826.4	0.376	219.4	-19.9	-1.96	0.891	112.9	0.432	0.828	221.1	261.1	0.471D	1.186A	-4.65	1.250	65.4	108.5	-10.2	0.522
43826.4	43870.0	0.522	118.4	3.9	1.96	1.143	116.1	0.440	0.705	241.1	373.0	0.395	1.016A	2.77	1.899	94.0	226.7	12.7	0.418
7.92	10.44		-/-	17.2	0.0	103.5	0.0	0.273	1.070	19.0	-54.9	18.084	0.217	6.687	55.1	168.7	116.6	86.8	1.235
43800.0	43828.8	0.507	216.6	-17.9	-1.98	1.004	120.1	0.502	1.000	240.3	274.2	0.498D	1.502A	-4.79	1.331	64.2	105.8	-9.9	0.580
43828.8	43870.0	0.580	119.5	3.4	1.95	1.203	118.5	0.478	0.755	246.2	374.2	0.394	1.117A	2.94	1.924	94.6	222.5	13.2	0.430
10.89	10.78	765.2	-/-	19.1	2.5	107.4	0.0	0.278	1.070	17.7	-44.2	19.960	0.176	6.962	44.5	169.9	112.4	89.8	0.888
							ARRIVAL DATE = 2443872.0												
43640.0	43810.4	0.235	186.9	-32.6	-6.86	0.912	77.7	0.264	0.872	139.4	297.0	0.642D	1.101	4.10	1.270	78.1	63.3	18.8	0.276
43810.4	43872.0	0.276	117.1	13.0	3.53	1.029	102.1	0.310	0.587	210.5	375.4	0.405	0.769A	0.83	1.787	93.6	239.6	4.2	0.349
5.27	8.47	232.6	-/-	51.9	1.6	77.9	0.0	0.285	1.108	357.8	6.1	12.951	0.777	2.352	18.9	156.4	122.7	80.1	0.997
43650.0	43811.1	0.220	197.9	-29.4	-4.93	0.902	78.0	0.270	0.860	141.9	291.9	0.628D	1.092	1.93	1.264	77.2	67.0	8.5	0.282
43811.1	43872.0	0.282	116.8	11.9	3.30	1.032	102.6	0.313	0.589	211.8	375.5	0.405	0.774A	1.07	1.788	93.7	239.2	5.5	0.350
5.04	8.49	2.7	-/-	49.1	0.0	79.0	0.0	0.283	1.108	2.5	-4.0	13.060	0.745	2.409	11.9	165.4	122.2	76.5	1.049
43660.0	43812.1	0.212	206.8	-28.5	-3.90	0.891	78.5	0.275	0.849	145.2	287.6	0.615D	1.083	0.67	1.259	76.4	71.3	2.8	0.293
43812.1	43872.0	0.293	116.3	10.3	2.97	1.037	103.5	0.317	0.593	213.9	375.9	0.405	0.781A	1.41	1.791	93.8	238.5	7.2	0.351
4.92	8.53		-/-	45.3	0.0	80.8	0.0	0.280	1.108	4.9	-9.7	13.095	0.691	2.594	12.0	170.0	121.4	76.2	1.101
43670.0	43813.5	0.206	214.6	-28.4	-3.23	0.891	79.1	0.281	0.838	148.7	283.5	0.602D	1.073	-0.22	1.253	75.6	75.5	-0.9	0.306
43813.5	43872.0	0.305	116.0	8.9	2.59	1.044	104.4	0.323	0.598	216.2	376.2	0.405	0.790A	1.70	1.795	93.9	237.6	8.7	0.353
4.83	8.58		-/-	41.5	0.0	82.8	0.0	0.278	1.108	6.7	-14.0	13.175	0.634	2.825	14.6	172.7	120.4	76.5	1.158
43680.0	43814.7	0.201	221.7	-28.6	-3.77	0.870	79.9	0.287	0.826	152.3	279.4	0.589D	1.063	-0.90	1.246	74.9	79.7	-3.4	0.319
43814.7	43872.0	0.319	115.7	7.3	2.47	1.050	105.4	0.329	0.602	218.4	376.5	0.404	0.800A	1.94	1.798	94.1	236.7	9.9	0.355
4.76	8.63		-/-	37.7	0.0	84.7	0.0	0.275	1.108	8.4	-17.7	13.285	0.582	3.096	17.8	174.0	119.4	76.9	1.219
43690.0	43815.8	0.197	228.0	-28.9	-2.44	0.859	80.7	0.294	0.814	156.0	275.4	0.575D	1.053	-1.44	1.239	74.1	83.7	-5.2	0.333
43815.8	43872.0	0.333	115.6	7.0	2.29	1.058	106.3	0.335	0.608	220.6	376.9	0.404	0.811A	2.14	1.802	94.2	235.7	10.8	0.356
4.70	8.67		-/-	34.1	0.0	86.5	0.0	0.273	1.108	10.0	-21.2	13.418	0.534	3.410	21.2	174.1	118.3	77.4	1.287
43700.0	43816.9	0.192	233.4	-29.1	-2.20	0.849	81.8	0.301	0.802	159.8	271.4	0.560D	1.044	-1.90	1.232	73.3	87.5	-6.5	0.347
43816.9	43872.0	0.347	115.6	6.3	2.14	1.065	107.2	0.341	0.613	222.7	377.2	0.404	0.823A	2.30	1.807	94.4	234.7	11.6	0.358
4.64	8.72		-/-	30.8	0.0	88.2	0.0	0.272	1.108	11.5	-24.8	13.569	0.491	3.770	24.8	173.5	117.3	77.9	1.361
43710.0	43817.9	0.189	237.8	-29.3	-2.03	0.838	83.0	0.310	0.790	163.9	267.5	0.545D	1.034	-2.28	1.224	72.6	91.2	-7.4	0.362
43817.9	43872.0	0.361	115.6	5.7	2.02	1.072	108.0	0.348	0.619	224.7	377.6	0.404	0.835A	2.43	1.811	94.5	233.6	12.3	0.360
4.59	8.77		-/-	27.7	0.0	89.8	0.0	0.271	1.108	13.0	-28.5	13.737	0.453	4.182	28.6	172.5	116.2	78.5	1.443
43720.0	43818.9	0.185	240.8	-29.4	-1.90	0.827	84.5	0.319	0.777	168.1	263.8	0.529D	1.025	-2.63	1.216	71.8	94.7	-8.1	0.376
43818.9	43872.0	0.376	115.7	5.2	1.92	1.080	108.8	0.355	0.626	226.6	378.0	0.403	0.848A	2.55	1.815	94.7	232.6	12.8	0.362
4.55	8.83		-/-	24.8	0.0	91.4	0.0	0.270	1.108	14.3	-32.7	13.926	0.419	4.653	32.7	171.2	115.1	79.1	1.531

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A SPEED R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
43730.0	43819.8	0.184	242.1	-29.2	-1.82	0.817	86.4	0.329	0.766	172.7	260.3	0.514D	1.018	-2.94	1.208	71.0	98.0	-8.6	0.390
43819.8	43872.0	0.390	115.8	4.8	1.83	1.088	109.7	0.363	0.632	228.5	378.3	0.403	0.862A	2.65	1.820	94.9	231.4	13.3	0.364
4.52	8.88		-/-	22.3	0.0	92.9	0.0	0.269	1.108	15.5	-37.3	14.141	0.389	5.178	37.4	169.9	113.9	80.0	1.623
43740.0	43820.7	0.185	241.4	-28.8	-1.78	0.808	88.8	0.340	0.756	177.6	257.1	0.499D	1.012	-3.23	1.201	70.3	101.2	-9.1	0.405
43820.7	43872.0	0.405	116.0	4.5	1.76	1.097	110.5	0.370	0.640	230.3	378.7	0.403	0.876A	2.74	1.825	95.0	230.3	13.7	0.366
4.53	8.95		-/-	20.1	0.0	94.3	0.0	0.269	1.108	16.5	-42.5	14.395	0.360	5.743	42.6	168.7	112.8	81.1	1.710
43750.0	43821.6	0.191	238.5	-27.9	-1.76	0.802	91.7	0.352	0.748	183.2	254.5	0.484D	1.011A	-3.52	1.196	69.5	104.0	-9.4	0.421
43821.6	43872.0	0.421	116.2	4.1	1.69	1.106	111.3	0.379	0.648	232.1	379.1	0.402	0.893A	2.82	1.830	95.2	229.1	14.1	0.368
4.62	9.02		-/-	18.2	0.0	95.8	0.0	0.269	1.108	17.2	-48.0	14.710	0.334	6.314	48.1	167.6	111.5	82.4	1.776
43760.0	43822.6	0.207	233.9	-26.4	-1.78	0.801	95.5	0.365	0.744	189.7	252.8	0.472D	1.016A	-3.80	1.193	68.6	106.4	-9.7	0.438
43822.6	43872.0	0.438	116.5	3.8	1.62	1.116	112.1	0.388	0.657	234.1	379.5	0.402	0.912A	2.90	1.836	95.4	227.7	14.4	0.371
4.84	9.10		-/-	16.8	0.0	97.3	0.0	0.269	1.108	17.5	-53.3	15.120	0.309	6.826	53.5	166.8	110.2	83.9	1.799
43770.0	43823.7	0.237	228.4	-24.3	-1.83	0.809	100.1	0.380	0.749	197.5	252.6	0.464D	1.033A	-4.09	1.197	67.8	108.3	-9.9	0.458
43823.7	43872.0	0.458	116.9	3.5	1.55	1.128	113.1	0.399	0.669	236.2	379.9	0.402	0.936A	2.98	1.844	95.7	226.1	14.7	0.375
5.31	9.20		-/-	16.0	0.0	99.1	0.0	0.270	1.108	17.6	-57.4	15.681	0.283	7.202	57.6	166.5	108.6	85.4	1.752
43780.0	43824.9	0.290	223.3	-22.0	-1.89	0.835	105.9	0.399	0.770	207.5	254.9	0.463D	1.077A	-4.38	1.212	66.7	109.2	-10.1	0.483
43824.9	43872.0	0.483	117.4	3.2	1.48	1.144	114.3	0.414	0.685	238.8	380.5	0.401	0.969A	3.07	1.853	96.0	224.1	15.0	0.380
6.21	9.35		-/-	15.6	0.0	101.1	0.0	0.271	1.108	17.6	-58.4	16.497	0.254	7.350	58.7	167.1	106.7	86.6	1.612
43790.0	43826.6	0.374	219.3	-19.8	-1.92	0.892	112.7	0.430	0.830	221.3	261.5	0.473D	1.186A	-4.63	1.251	65.6	108.6	-10.2	0.519
43826.6	43872.0	0.519	118.1	2.8	1.40	1.167	115.9	0.437	0.711	242.2	381.2	0.400	1.021A	3.18	1.867	96.4	221.2	15.3	0.389
7.88	9.59		-/-	16.1	0.0	103.8	0.0	0.273	1.108	18.3	-53.9	17.792	0.220	7.130	54.1	168.8	103.9	87.4	1.349
43800.0	43829.0	0.503	216.5	-17.8	-1.83	1.004	119.9	0.499	1.000	240.5	274.7	0.501D	1.500A	-4.75	1.331	64.5	105.8	-10.0	0.575
43829.0	43872.0	0.575	119.3	2.4	1.30	1.206	118.2	0.475	0.760	247.1	382.2	0.399	1.120A	3.31	1.892	97.1	216.8	15.5	0.405
10.81	10.05	453.8	-/-	18.3	1.5	107.7	0.0	0.278	1.108	18.1	-42.5	19.830	0.179	6.859	42.8	169.9	99.7	89.7	0.949
									ARRIVAL DATE = 2443874.0										
43640.0	43810.8	0.235	186.7	-33.0	-6.98	0.913	77.8	0.263	0.872	138.3	297.5	0.643D	1.101	4.21	1.271	78.3	63.6	19.4	0.275
43810.8	43874.0	0.275	115.8	9.7	2.63	1.035	102.4	0.307	0.592	212.2	383.5	0.410	0.774A	1.71	1.757	95.5	234.9	9.4	0.320
5.27	7.65	89.0	-/-	51.3	0.6	78.4	0.0	0.284	1.144	356.8	10.8	12.925	0.785	2.338	19.6	155.7	110.8	81.8	1.029
43650.0	43811.4	0.220	197.9	-29.6	-4.96	0.902	78.1	0.269	0.861	141.8	292.3	0.629D	1.092	1.96	1.265	77.3	67.2	8.7	0.280
43811.4	43874.0	0.280	115.5	8.6	2.37	1.038	102.9	0.309	0.594	213.3	383.6	0.410	0.777A	1.98	1.759	95.5	234.5	10.9	0.321
5.03	7.69		-/-	47.8	0.0	79.4	0.0	0.283	1.144	1.4	0.1	12.816	0.755	2.470	9.4	165.1	110.3	78.1	1.110
43660.0	43812.5	0.211	206.8	-28.6	-3.91	0.892	78.6	0.274	0.849	145.2	288.0	0.616D	1.083	0.67	1.259	76.5	71.5	2.8	0.291
43812.5	43874.0	0.291	115.2	7.0	1.99	1.044	103.7	0.314	0.598	215.4	383.9	0.410	0.785A	2.36	1.762	95.6	233.7	12.9	0.324
4.91	7.78		-/-	43.8	0.0	81.2	0.0	0.280	1.144	3.8	-5.5	12.826	0.699	2.683	7.7	169.8	109.3	77.5	1.176
43670.0	43813.7	0.205	214.6	-28.4	-3.23	0.881	79.2	0.280	0.838	148.7	283.8	0.603D	1.073	-0.22	1.253	75.7	75.7	-0.9	0.304
43813.7	43874.0	0.304	115.0	5.7	1.72	1.050	104.6	0.319	0.602	217.5	384.2	0.410	0.794A	2.64	1.765	95.8	232.7	14.3	0.327
4.82	7.86		-/-	39.8	0.0	83.1	0.0	0.277	1.144	5.8	-9.8	12.901	0.641	2.939	10.1	172.5	108.3	77.6	1.244
43680.0	43814.9	0.200	221.7	-28.6	-2.77	0.871	79.9	0.286	0.826	152.3	279.8	0.590D	1.063	-0.91	1.246	74.9	79.9	-3.4	0.318
43814.9	43874.0	0.317	114.9	4.9	1.51	1.056	105.5	0.325	0.607	219.7	384.5	0.409	0.804A	2.86	1.769	95.9	231.7	15.4	0.330
4.75	7.94		-/-	36.0	0.0	85.0	0.0	0.275	1.144	7.5	-13.5	13.012	0.588	3.239	13.6	173.8	107.2	77.8	1.315
43690.0	43816.0	0.196	228.0	-28.9	-2.43	0.860	80.8	0.293	0.815	156.0	275.7	0.576D	1.053	-1.45	1.240	74.2	83.9	-5.2	0.332
43816.0	43874.0	0.331	114.9	4.2	1.36	1.053	106.4	0.332	0.612	221.8	384.8	0.409	0.815A	3.02	1.773	96.1	230.6	16.2	0.333
4.69	8.02		-/-	32.4	0.0	86.8	0.0	0.273	1.144	9.2	-17.1	13.147	0.539	3.585	17.1	174.0	106.1	78.1	1.394
43700.0	43817.1	0.192	233.4	-29.1	-2.19	0.849	81.8	0.300	0.802	159.8	271.7	0.561D	1.043	-1.90	1.232	73.4	87.7	-6.5	0.346
43817.1	43874.0	0.346	114.9	3.7	1.24	1.070	107.2	0.338	0.618	223.9	385.1	0.409	0.826A	3.14	1.777	96.3	229.5	16.8	0.336
4.63	8.09		-/-	29.0	0.0	88.5	0.0	0.271	1.144	10.8	-20.7	13.299	0.496	3.987	20.7	173.4	105.0	78.5	1.482
43710.0	43818.1	0.188	237.8	-29.3	-2.02	0.838	83.0	0.309	0.790	163.9	267.9	0.546D	1.034	-2.29	1.225	72.7	91.4	-7.4	0.360
43818.1	43874.0	0.360	115.1	3.3	1.14	1.077	108.0	0.345	0.623	225.8	385.4	0.408	0.838A	3.24	1.781	96.4	228.3	17.2	0.338
4.58	8.17		-/-	26.0	0.0	90.1	0.0	0.270	1.144	12.3	-24.5	13.467	0.458	4.451	24.6	172.4	103.8	79.0	1.579
43720.0	43819.1	0.185	240.8	-29.4	-1.89	0.828	84.6	0.318	0.778	168.1	264.1	0.531D	1.025	-2.63	1.217	71.9	94.9	-8.2	0.374
43819.1	43874.0	0.374	115.2	2.9	1.06	1.085	108.8	0.352	0.630	227.6	385.7	0.408	0.851A	3.33	1.786	96.6	227.1	17.6	0.341
4.53	8.25		-/-	23.1	0.0	91.7	0.0	0.270	1.144	13.6	-28.7	13.653	0.423	4.986	28.9	171.2	102.7	79.5	1.687
43730.0	43820.0	0.193	242.1	-29.2	-1.80	0.818	86.5	0.327	0.767	172.7	260.6	0.516D	1.018	-2.94	1.209	71.2	98.2	-8.7	0.388
43820.0	43874.0	0.389	115.5	2.6	1.00	1.093	109.6	0.360	0.636	229.4	386.0	0.407	0.865A	3.40	1.790	96.8	225.9	17.8	0.344
4.51	8.33		-/-	20.6	0.0	93.2	0.0	0.269	1.144	14.9	-33.5	13.864	0.392	5.592	33.6	170.0	101.5	80.3	1.802
43740.0	43820.9	0.184	241.4	-28.7	-1.76	0.809	88.8	0.338	0.756	177.7	257.5	0.501D	1.012	-3.23	1.202	70.4	101.3	-9.1	0.403
43820.9	43874.0	0.403	115.7	2.4	0.94	1.101	110.4	0.357	0.643	231.2	386.3	0.407	0.880A	3.46	1.795	97.0	224.7	18.0	0.347
4.52	8.42		-/-	18.4	0.0	94.7	0.0	0.269	1.144	15.8	-38.8	14.112	0.364	6.253	39.0	168.7	100.3	81.3	1.913
43750.0	43821.8	0.190	238.5	-27.8	-1.74	0.803	91.7	0.350	0.749	183.2	254.9	0.487D	1.011A	-3.51	1.196	69.6	104.1	-9.4	0.419
43821.8	43874.0	0.419	116.0	2.2	0.89	1.110	111.2	0.376	0.651	233.0	386.6	0.407	0.896A	3.51	1.801	97.2	223.4	18.2	0.351
4.60	8.52		-/-	16.6	0.0	96.1	0.0	0.269	1.144	16.5	-44.6	14.420	0.338	6.926	44.8	167.7	99.1	82.6	2.003
43760.0	43822.8	0.205	233.8	-26.3	-1.76	0.802	95.5	0.363	0.745	189.7	253.3	0.475D	1.016A	-3.79	1.194	68.8	106.6	-9.7	0.435
43822.8	43874.0	0.435	116.4	2.0	0.85	1.120	112.3	0.385	0.660	234.9	386.9	0.406	0.915A	3.56	1.806	97.4	222.0	18.3	0.355
4.82	8.64		-/-	15.3	0.0	97.7	0.0	0.269	1.144	16.8	-50.2	14.823	0.312	7.526	50.5	166.9	97.7	84.2	2.039
43770.0	43823.9	0.236	228.2	-24.3	-1.80	0.811	100.1	0.378	0.750	197.6	253.1	0.467D	1.033A	-4.07	1.198	67.9	108.4	-10.0	0.455
43823.9	43874.0	0.455	116.8	1.8	0.80	1.131	113.0	0.397	0.672	236.9	387.3	0.405	0.938A	3.62	1.813	97.7	220.4	18.4	0.360
5.28	8.78		-/-	14.5	0.0	99.4	0.0	0.270	1.144	16.9	-54.6	15.376	0.286	7.935	54.9	166.6	96.2	85.7	1.986
43780.0	43825.2	0.298	223.1	-21.9	-1.85	0.837	105.8	0.396	0.772	207.7	255.5	0.466D	1.077A	-4.35	1.214	66.9	109.3	-10.2	0.479
43825.2	43874.0	0.479	117.4	1.6	0.76	1.146	114.1	0.411	0.688	239.4	387.7	0.405	0.970A	3.67	1.823	98.0	218.3	18.4	0.367
6.18	8.97		-/-	14.3	0.0	101.5	0.0	0.271	1.144	17.1	-55.6	16.185	0.258	8.028	55.9	167.2	94.3	86.8	1.811
43790.0	43826.8	0.371	218.2	-19.7	-1.98	0.894	112.6	0.426	0.831	221.5	262.1	0.477D	1.186A	-4.59	1.252	65.8	108.6	-10.2	0.514
43826.8	43874.0	0.514	118.2	1.4	0.70	1.169	115.7	0.433	0.712	242.7	388.3	0.404	1.021A	3.73	1.837	98.5	215.5	18.3	0.378
7.82	9.28		-/-	15.1	0.0	104.2	0.0	0.274	1.144	19.0	-50.7	17.474	0.224	7.628	51.1	168.8	91.6	87.6	1.485

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A P A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
43800.0	43829.3	0.499	216.4	-17.7	-1.77	1.004	119.7	0.495	1.001	240.8	275.4	0.505D	1.497A	-4.70	1.331	64.8	105.8	-10.0	0.569
43829.3	43874.0	0.569	119.6	1.2	0.64	1.205	117.9	0.471	0.759	247.3	389.0	0.402	1.116A	3.81	1.860	99.2	211.3	17.9	0.397
10.72	9.84	177.2	-/-	17.7	0.6	108.1	0.0	0.279	1.144	18.7	-39.2	19.673	0.183	6.735	39.6	169.8	87.6	89.5	1.009
								ARRIVAL DATE = 2443876.0											
43630.0	43809.1	0.275	171.8	-38.3	-10.79	0.922	77.3	0.260	0.882	135.1	301.2	0.652D	1.111	8.28	1.275	78.9	60.6	36.2	0.305
43809.1	43876.0	0.305	117.9	31.5	9.04	1.032	101.2	0.297	0.590	209.7	390.4	0.414	0.765A	-4.71	1.726	96.8	230.9	-25.9	0.322
5.94	7.71	447.5	-/+	47.2	2.8	75.8	0.0	0.290	1.177	355.2	4.0	13.512	0.637	2.649	37.8	141.2	99.3	80.6	0.954
43640.0	43809.0	0.235	187.9	-30.9	-6.45	0.911	77.5	0.269	0.869	138.6	294.9	0.636D	1.103	3.72	1.269	77.7	62.1	16.5	0.283
43809.0	43876.0	0.283	117.1	25.4	6.87	1.031	101.1	0.297	0.589	209.4	390.3	0.414	0.764A	-2.54	1.725	96.8	230.8	-14.5	0.303
5.27	7.18	422.1	-/+	51.8	2.9	75.5	0.0	0.290	1.177	1.5	-10.1	13.073	0.742	2.416	25.4	158.8	100.0	74.3	0.957
43650.0	43811.7	0.219	197.8	-29.8	-4.99	0.902	78.1	0.268	0.861	141.7	292.7	0.630D	1.092	1.98	1.265	77.4	67.4	8.8	0.279
43811.7	43876.0	0.279	115.1	-6.7	-1.83	1.042	103.0	0.306	0.597	214.1	390.7	0.414	0.779A	6.16	1.731	97.1	229.2	32.6	0.343
5.02	8.29	30.6	-/-	50.0	0.2	79.8	0.0	0.282	1.177	0.8	18.6	12.997	0.763	2.376	18.7	164.8	97.3	79.6	1.043
43660.0	43812.8	0.211	206.8	-28.7	-3.91	0.892	78.6	0.273	0.850	145.2	288.4	0.618D	1.082	0.68	1.259	76.6	71.7	2.9	0.289
43812.8	43876.0	0.289	114.8	-4.2	-1.20	1.047	103.8	0.311	0.600	216.1	391.0	0.413	0.787A	5.52	1.734	97.2	228.3	29.5	0.336
4.90	8.10		-/-	43.7	0.0	81.6	0.0	0.279	1.177	3.4	9.5	12.744	0.707	2.686	9.6	169.6	96.7	78.4	1.192
43670.0	43814.0	0.205	214.6	-28.5	-3.23	0.882	79.2	0.279	0.839	148.7	284.2	0.605D	1.073	-0.23	1.253	75.8	75.9	-0.9	0.302
43814.0	43876.0	0.302	114.7	-3.0	-0.88	1.053	104.6	0.317	0.605	218.3	391.2	0.413	0.796A	5.20	1.738	97.4	227.2	27.9	0.334
4.81	8.05		-/-	38.8	0.0	83.5	0.0	0.276	1.177	5.4	3.1	12.715	0.649	3.009	3.7	172.3	95.9	78.1	1.303
43680.0	43815.1	0.200	221.7	-28.6	-2.76	0.871	79.9	0.285	0.827	152.3	280.1	0.591D	1.063	-0.91	1.247	75.0	80.1	-3.5	0.316
43815.1	43876.0	0.316	114.7	-2.3	-0.70	1.059	105.6	0.323	0.609	220.4	391.4	0.413	0.806A	5.02	1.741	97.5	226.1	26.9	0.334
4.74	8.06		-/-	34.6	0.0	85.4	0.0	0.274	1.177	7.3	-2.0	12.781	0.594	3.362	3.6	173.7	94.9	78.1	1.403
43690.0	43816.2	0.195	228.0	-28.9	-2.42	0.861	80.8	0.292	0.815	156.0	276.1	0.577D	1.053	-1.45	1.240	74.3	84.0	-5.3	0.330
43816.2	43876.0	0.330	114.8	-1.8	-0.58	1.066	106.3	0.329	0.614	222.4	391.7	0.412	0.816A	4.90	1.745	97.7	224.9	26.1	0.336
4.68	8.09		-/-	30.8	0.0	87.2	0.0	0.273	1.177	9.0	-6.5	12.893	0.545	3.761	7.5	173.9	93.9	78.2	1.505
43700.0	43817.3	0.191	233.5	-29.1	-2.18	0.850	81.8	0.299	0.803	159.8	272.1	0.563D	1.043	-1.90	1.233	73.5	87.9	-6.6	0.344
43817.3	43876.0	0.344	114.9	-1.5	-0.50	1.073	107.2	0.336	0.620	224.4	391.9	0.412	0.828A	4.82	1.749	97.9	223.7	25.6	0.337
4.62	8.14		-/-	27.4	0.0	88.9	0.0	0.271	1.177	10.6	-10.7	13.031	0.501	4.222	11.5	173.4	92.9	78.4	1.616
43710.0	43818.3	0.187	237.8	-29.3	-2.00	0.839	83.1	0.307	0.791	163.8	268.2	0.548D	1.034	-2.29	1.225	72.8	91.6	-7.5	0.358
43818.3	43876.0	0.358	115.1	-1.3	-0.45	1.080	108.0	0.343	0.625	226.3	392.2	0.411	0.840A	4.76	1.754	98.1	222.6	25.1	0.340
4.56	8.21		-/-	24.2	0.0	90.5	0.0	0.270	1.177	12.2	-15.0	13.188	0.463	4.761	15.6	172.4	91.8	78.7	1.740
43720.0	43819.3	0.183	240.8	-29.3	-1.87	0.829	84.6	0.316	0.779	168.1	264.5	0.533D	1.025	-2.63	1.217	72.0	95.1	-8.2	0.372
43819.3	43876.0	0.372	115.3	-1.1	-0.40	1.087	108.8	0.350	0.631	228.1	392.5	0.411	0.852A	4.72	1.758	98.2	221.4	24.7	0.342
4.52	8.28		-/-	21.4	0.0	92.1	0.0	0.270	1.177	13.6	-19.4	13.362	0.428	5.392	20.1	171.3	90.8	79.2	1.881
43730.0	43820.2	0.181	242.1	-29.2	-1.78	0.819	86.5	0.326	0.768	172.7	261.0	0.518D	1.018	-2.94	1.210	71.3	98.4	-8.8	0.386
43820.2	43876.0	0.386	115.6	-1.0	-0.37	1.095	109.5	0.357	0.638	229.8	392.7	0.410	0.866A	4.68	1.762	98.4	220.2	24.3	0.345
4.49	8.37		-/-	18.8	0.0	93.6	0.0	0.269	1.177	14.8	-24.4	13.559	0.397	6.126	25.0	170.0	89.7	79.8	2.036
43740.0	43821.2	0.182	241.3	-28.7	-1.73	0.810	88.8	0.336	0.758	177.7	257.9	0.503D	1.012	-3.23	1.203	70.5	101.5	-9.2	0.401
43821.2	43876.0	0.401	115.9	-0.9	-0.34	1.103	110.3	0.365	0.645	231.6	392.9	0.410	0.880A	4.65	1.767	98.6	219.0	24.0	0.349
4.50	8.46		-/-	16.5	0.0	95.1	0.0	0.269	1.177	15.8	-30.0	13.793	0.369	6.949	30.5	168.8	88.6	80.7	2.195
43750.0	43822.1	0.188	238.4	-27.8	-1.72	0.804	91.8	0.348	0.750	183.3	255.4	0.489D	1.011A	-3.50	1.197	69.8	104.3	-9.5	0.416
43822.1	43876.0	0.416	116.2	-0.8	-0.31	1.111	111.1	0.373	0.652	233.3	393.2	0.409	0.896A	4.63	1.772	98.8	217.7	23.6	0.353
4.58	8.57		-/-	14.7	0.0	96.6	0.0	0.269	1.177	16.5	-36.2	14.085	0.343	7.807	36.7	167.8	87.4	82.0	2.333
43760.0	43823.1	0.204	233.6	-26.2	-1.73	0.804	95.4	0.360	0.747	189.8	253.8	0.478D	1.016A	-3.78	1.195	69.0	106.7	-9.8	0.432
43823.1	43876.0	0.432	116.6	-0.7	-0.29	1.120	111.9	0.383	0.661	235.1	393.4	0.408	0.914A	4.60	1.778	99.1	216.4	23.2	0.357
4.80	8.70		-/-	13.4	0.0	98.1	0.0	0.270	1.177	16.9	-42.5	14.472	0.317	8.570	43.0	167.0	86.2	83.6	2.401
43770.0	43824.1	0.234	228.1	-24.2	-1.76	0.813	100.1	0.375	0.752	197.7	253.7	0.470D	1.033A	-4.05	1.199	68.1	108.5	-10.0	0.451
43824.1	43876.0	0.451	117.1	-0.6	-0.27	1.132	112.8	0.394	0.672	237.1	393.7	0.408	0.937A	4.58	1.785	99.3	214.8	22.8	0.363
5.25	8.86		-/-	12.7	0.0	99.8	0.0	0.270	1.177	17.0	-47.6	15.014	0.291	9.038	48.1	166.7	84.8	85.2	2.340
43780.0	43825.4	0.286	223.0	-21.8	-1.81	0.839	105.7	0.393	0.773	207.9	256.1	0.470D	1.077A	-4.32	1.215	67.2	109.4	-10.2	0.475
43825.4	43876.0	0.475	117.8	-0.6	-0.25	1.146	113.9	0.408	0.687	239.5	394.0	0.407	0.968A	4.56	1.794	99.7	212.9	22.3	0.371
6.13	9.08		-/-	12.8	0.0	101.9	0.0	0.272	1.177	17.3	-49.0	15.821	0.262	8.995	49.5	167.4	83.0	86.4	2.098
43790.0	43827.1	0.368	219.0	-19.6	-1.82	0.895	112.4	0.423	0.833	221.8	262.9	0.481D	1.185A	-4.55	1.253	66.1	108.7	-10.3	0.509
43827.1	43876.0	0.509	118.7	-0.5	-0.23	1.157	115.4	0.430	0.711	242.6	394.5	0.405	1.016A	4.53	1.807	100.2	210.4	21.5	0.383
7.76	9.43		-/-	13.9	0.0	104.6	0.0	0.274	1.177	18.4	-44.6	17.120	0.229	8.239	45.1	168.9	80.6	87.3	1.656
43800.0	43829.5	0.495	216.2	-17.6	-1.71	1.005	119.4	0.491	1.002	241.2	276.2	0.510D	1.494A	-4.65	1.332	65.1	105.8	-10.0	0.562
43829.5	43876.0	0.562	120.1	-0.4	-0.20	1.202	117.6	0.465	0.754	247.1	395.0	0.403	1.105A	4.50	1.830	100.9	206.7	20.4	0.404
10.61	10.05		-/-	17.2	0.0	108.5	0.0	0.279	1.177	19.5	-34.1	19.445	0.188	6.692	34.6	169.6	77.0	89.2	1.069
								ARRIVAL DATE = 2443878.0											
43630.0	43811.5	0.308	164.7	-43.7	-13.99	0.925	77.6	0.253	0.885	134.7	304.6	0.661D	1.109	11.41	1.277	79.7	65.1	47.4	0.338
43811.5	43878.0	0.337	118.1	33.3	10.50	1.042	102.7	0.303	0.597	213.8	397.0	0.416	0.777A	-6.19	1.705	98.4	223.5	-32.8	0.336
6.54	8.10	551.6	-/+	41.8	3.1	79.7	0.0	0.282	1.208	348.5	14.0	14.180	0.520	3.018	47.4	130.9	87.1	91.1	0.937
43640.0	43809.9	0.235	187.3	-31.9	-6.70	0.912	77.6	0.265	0.871	138.5	296.2	0.640D	1.102	3.94	1.270	78.0	62.8	17.9	0.279
43809.9	43878.0	0.278	116.6	21.6	5.78	1.035	101.5	0.297	0.592	210.9	396.8	0.416	0.768A	-1.46	1.702	98.2	224.7	-8.5	0.292
5.27	6.87	94.8	-/+	50.5	0.7	77.0	0.0	0.287	1.208	0.7	-4.2	12.993	0.764	2.374	22.3	157.3	87.8	76.3	1.028
43650.0	43810.3	0.222	198.1	-28.9	-4.84	0.901	77.9	0.273	0.858	142.0	290.7	0.624D	1.093	1.86	1.263	76.9	66.3	8.0	0.287
43810.3	43878.0	0.287	116.7	23.5	6.47	1.037	101.8	0.298	0.593	211.6	396.8	0.416	0.770A	-2.15	1.702	98.2	224.5	-12.3	0.295
5.07	6.97	390.2	-/+	50.6	2.6	77.6	0.0	0.286	1.208	4.9	-18.1	13.159	0.719	2.461	25.1	166.2	87.6	73.6	0.964
43660.0	43810.8	0.216	206.9	-27.9	-3.86	0.889	78.3	0.281	0.846	145.5	285.5	0.608D	1.084	0.63	1.257	75.8	70.1	2.6	0.303
43810.8	43878.0	0.303	117.0	26.9	7.76	1.039	102.2	0.300	0.595	212.5	396.9	0.416	0.773A	-3.44	1.704	98.3	224.1	-19.4	0.305
4.98	7.24	984.6	-/+	51.0	6.3	78.5	0.0	0.284	1.208	7.6	-29.2	13.471	0.646	2.627	33.2	171.2	87.3	73.4	0.854

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
43710.0	43818.1	0.188	237.8	-29.3	-2.01	0.838	83.1	0.308	0.790	163.9	267.9	0.547D	1.034	-2.29	1.225	72.7	91.4	-7.5	0.359
43818.1	43878.0	0.359	115.9	-13.3	-4.52	1.077	107.5	0.337	0.623	225.4	398.0	0.413	0.833A	8.88	1.726	99.3	217.3	42.1	0.392
4.57	9.70		-/-	24.8	0.0	90.2	0.0	0.270	1.208	16.1	13.5	13.317	0.458	4.655	17.3	172.4	82.8	74.5	1.676
43720.0	43819.3	0.183	240.8	-29.3	-1.87	0.829	84.6	0.316	0.779	168.1	264.6	0.533D	1.025	-2.63	1.218	72.0	95.1	-8.2	0.372
43819.3	43878.0	0.372	116.0	-10.2	-3.68	1.085	108.4	0.345	0.630	227.6	398.3	0.412	0.847A	7.92	1.731	99.6	216.0	38.0	0.382
4.52	9.39		-/-	20.8	0.0	92.1	0.0	0.269	1.208	16.4	5.5	13.285	0.429	5.546	10.9	171.3	81.4	75.7	1.949
43730.0	43820.4	0.181	242.1	-29.2	-1.78	0.819	86.5	0.325	0.768	172.7	261.2	0.519D	1.018	-2.94	1.210	71.3	98.5	-8.8	0.385
43820.4	43878.0	0.385	116.3	-8.4	-3.12	1.093	109.2	0.353	0.636	229.4	398.5	0.412	0.861A	7.35	1.736	99.8	214.9	35.4	0.378
4.48	9.28		-/-	17.6	0.0	93.8	0.0	0.269	1.208	17.2	-1.3	13.375	0.400	6.540	8.8	170.0	80.2	76.6	2.214
43740.0	43821.4	0.181	241.3	-28.7	-1.72	0.811	88.9	0.335	0.759	177.7	258.3	0.505D	1.012	-3.22	1.204	70.6	101.6	-9.2	0.399
43821.4	43878.0	0.399	116.6	-7.1	-2.73	1.101	110.0	0.361	0.643	231.2	398.7	0.411	0.876A	6.95	1.741	100.0	213.8	33.4	0.377
4.49	9.25		-/-	14.9	0.0	95.4	0.0	0.269	1.208	18.0	-8.1	13.534	0.373	7.692	11.6	168.9	79.0	77.6	2.493
43750.0	43822.3	0.187	238.3	-27.7	-1.69	0.806	91.8	0.346	0.751	183.4	255.8	0.492D	1.011A	-3.50	1.198	69.9	104.5	-9.6	0.413
43822.3	43878.0	0.413	116.9	-6.1	-2.43	1.109	110.8	0.370	0.651	233.0	398.9	0.410	0.891A	6.65	1.746	100.2	212.7	31.8	0.378
4.57	9.28		-/-	12.8	0.0	96.9	0.0	0.269	1.208	18.5	-15.5	13.767	0.347	8.961	17.5	167.8	77.9	78.8	2.762
43760.0	43823.3	0.202	233.5	-26.2	-1.70	0.805	95.4	0.358	0.748	189.9	254.3	0.481D	1.016A	-3.76	1.196	69.1	106.9	-9.9	0.429
43823.3	43878.0	0.429	117.4	-5.3	-2.19	1.119	111.6	0.379	0.659	234.8	399.1	0.409	0.909A	6.40	1.751	100.5	211.5	30.3	0.380
4.77	9.35		-/-	11.3	0.0	98.5	0.0	0.270	1.208	18.8	-23.4	14.106	0.322	10.142	24.8	167.1	76.7	80.6	2.942
43770.0	43824.4	0.232	227.9	-24.0	-1.72	0.815	100.0	0.371	0.754	197.9	254.2	0.474D	1.033A	-4.03	1.201	68.3	108.7	-10.1	0.447
43824.4	43878.0	0.447	117.9	-4.6	-1.98	1.129	112.5	0.390	0.670	236.7	399.3	0.409	0.931A	6.18	1.758	100.7	210.1	28.9	0.384
5.22	9.46		-/-	10.6	0.0	100.3	0.0	0.271	1.208	18.9	-30.8	14.618	0.296	10.799	31.9	166.9	75.3	82.6	2.901
43780.0	43825.7	0.283	222.8	-21.7	-1.76	0.841	105.6	0.389	0.775	208.1	256.8	0.474D	1.077A	-4.29	1.216	67.4	109.5	-10.3	0.470
43825.7	43878.0	0.470	118.5	-3.9	-1.77	1.143	113.6	0.404	0.684	239.1	399.6	0.408	0.961A	5.96	1.767	101.1	208.5	27.4	0.391
6.09	9.65		-/-	11.0	0.0	102.4	0.0	0.272	1.208	19.0	-35.0	15.419	0.268	10.459	36.0	167.5	73.7	84.6	2.532
43790.0	43827.4	0.365	218.8	-19.4	-1.77	0.897	112.2	0.419	0.835	222.1	263.7	0.486D	1.185A	-4.51	1.254	66.4	108.8	-10.3	0.503
43827.4	43878.0	0.503	119.5	-3.3	-1.56	1.154	115.1	0.425	0.706	242.1	399.9	0.406	1.006A	5.74	1.780	101.6	206.3	25.7	0.402
7.69	9.98		-/-	12.8	0.0	105.1	0.0	0.275	1.208	19.6	-33.5	16.745	0.234	9.004	34.4	169.0	71.5	86.2	1.875
43800.0	43829.9	0.490	216.0	-17.4	-1.64	1.005	119.1	0.487	1.003	241.6	277.2	0.515D	1.491A	-4.59	1.332	65.5	105.9	-10.1	0.554
43829.9	43878.0	0.554	121.0	-2.6	-1.34	1.197	117.3	0.459	0.747	246.4	400.3	0.404	1.090A	5.50	1.801	102.4	203.2	23.4	0.424
10.49	10.59		-/-	16.8	0.0	109.0	0.0	0.280	1.208	20.3	-26.4	19.111	0.193	6.836	27.3	169.4	68.3	88.8	1.127
ARRIVAL DATE = 2443880.0																			
43640.0	43810.4	0.235	186.9	-32.6	-6.96	0.912	77.7	0.264	0.872	138.4	297.0	0.642D	1.101	4.10	1.270	78.1	63.3	18.8	0.276
43810.4	43880.0	0.276	117.0	20.3	5.41	1.036	101.6	0.296	0.593	211.2	402.4	0.417	0.768A	-1.11	1.679	99.3	219.6	-6.2	0.295
5.27	6.96	19.1	-/+	50.5	0.1	77.9	0.0	0.285	1.236	0.6	-1.8	12.949	0.777	2.351	21.8	156.4	76.5	77.2	1.045
43650.0	43810.9	0.221	198.0	-29.3	-4.91	0.901	78.0	0.271	0.860	141.9	291.6	0.627D	1.093	1.91	1.264	77.1	66.8	8.4	0.283
43810.9	43880.0	0.283	117.0	21.3	5.82	1.038	101.9	0.298	0.594	212.0	402.4	0.417	0.771A	-1.52	1.680	99.4	219.3	-8.5	0.297
5.05	7.02	176.0	-/+	50.0	1.2	78.7	0.0	0.284	1.236	5.0	-15.2	13.083	0.739	2.421	22.4	165.6	76.3	74.2	1.010
43660.0	43811.7	0.214	206.8	-28.3	-3.88	0.890	78.4	0.278	0.848	145.3	286.8	0.612D	1.083	0.65	1.258	76.2	70.8	2.7	0.297
43811.7	43880.0	0.297	117.1	23.3	6.64	1.041	102.5	0.301	0.596	213.4	402.5	0.417	0.776A	-2.35	1.682	99.4	218.7	-13.0	0.303
4.94	7.18	504.5	-/+	49.3	3.3	80.0	0.0	0.282	1.236	7.9	-25.2	13.346	0.673	2.559	29.0	170.5	75.9	73.8	0.942
43670.0	43812.5	0.209	214.6	-28.1	-3.24	0.879	79.0	0.285	0.835	148.9	282.1	0.597D	1.074	-0.22	1.251	75.2	74.7	-0.8	0.313
43812.5	43880.0	0.312	117.4	25.8	7.68	1.045	103.0	0.304	0.598	214.7	402.6	0.416	0.780A	-3.41	1.684	99.5	218.1	-18.4	0.312
4.88	7.43	984.3	-/+	49.0	6.1	81.2	0.0	0.280	1.236	10.2	-33.6	13.666	0.606	2.732	36.1	173.5	75.7	74.3	0.856
43760.0	43823.1	0.203	233.6	-26.2	-1.72	0.804	95.4	0.360	0.747	189.8	253.9	0.478D	1.016A	-3.78	1.195	69.0	106.8	-9.8	0.432
43823.1	43880.0	0.431	118.8	-16.0	-6.57	1.111	110.9	0.371	0.652	233.2	404.0	0.410	0.893A	10.69	1.724	101.5	207.1	44.3	0.448
4.79	11.30		-/-	13.3	0.0	98.2	0.0	0.270	1.236	29.5	27.0	14.434	0.318	8.635	30.4	167.0	71.7	71.1	2.430
43770.0	43824.5	0.231	227.9	-24.0	-1.72	0.815	100.0	0.371	0.754	197.9	254.4	0.474D	1.033A	-4.03	1.201	68.4	108.7	-10.1	0.447
43824.5	43880.0	0.446	119.2	-12.5	-5.33	1.123	112.0	0.383	0.663	235.6	404.2	0.409	0.918A	9.43	1.732	101.8	206.2	39.5	0.436
5.21	10.96		-/-	10.5	0.0	100.4	0.0	0.271	1.236	26.6	13.0	14.582	0.297	10.877	17.4	166.9	69.5	74.2	2.935
43780.0	43825.9	0.282	222.6	-21.6	-1.73	0.842	105.5	0.387	0.777	208.3	257.3	0.476D	1.077A	-4.27	1.217	67.6	109.6	-10.3	0.467
43825.9	43880.0	0.467	119.8	-10.0	-4.45	1.137	113.2	0.398	0.677	238.1	404.4	0.408	0.947A	8.53	1.741	102.2	205.0	35.6	0.433
6.06	10.87		-/-	10.0	0.0	102.7	0.0	0.272	1.236	24.3	-1.9	15.193	0.271	11.433	10.4	167.6	67.4	78.3	2.830
43790.0	43827.7	0.362	218.6	-19.3	-1.71	0.899	112.0	0.415	0.837	222.4	264.5	0.490D	1.185A	-4.47	1.255	66.7	108.9	-10.4	0.498
43827.7	43880.0	0.498	120.7	-7.8	-3.69	1.157	114.7	0.419	0.699	241.2	404.6	0.406	0.991A	7.74	1.754	102.8	203.3	31.8	0.438
7.63	10.99		-/-	12.0	0.0	105.6	0.0	0.275	1.236	22.8	-12.3	16.453	0.239	9.603	15.4	169.1	65.0	82.9	2.058
43800.0	43830.2	0.485	215.9	-17.3	-1.56	1.006	118.8	0.482	1.004	242.0	278.1	0.520D	1.488A	-4.53	1.332	65.9	105.9	-10.1	0.546
43830.2	43880.0	0.546	122.2	-5.8	-3.00	1.189	116.9	0.452	0.737	245.4	404.9	0.403	1.070A	7.01	1.775	103.6	200.9	27.6	0.454
10.37	11.46		-/-	16.7	0.0	109.6	0.0	0.281	1.236	22.0	-14.8	18.822	0.199	6.873	17.0	169.2	61.8	87.7	1.168
ARRIVAL DATE = 2443882.0																			
43640.0	43811.0	0.235	186.5	-33.3	-7.04	0.913	77.8	0.262	0.872	138.3	297.8	0.644D	1.101	4.27	1.271	78.3	63.7	19.7	0.274
43811.0	43882.0	0.274	118.1	20.0	5.29	1.036	101.5	0.296	0.592	211.0	407.3	0.417	0.768A	-1.00	1.660	100.3	215.5	-5.3	0.307
5.27	7.30	23.4	-/+	50.9	0.2	78.8	0.0	0.284	1.263	0.9	-0.3	12.913	0.788	2.332	22.1	155.4	66.5	77.8	1.044
43650.0	43811.4	0.220	197.8	-29.7	-4.97	0.902	78.1	0.269	0.861	141.8	292.4	0.629D	1.092	1.96	1.265	77.3	67.2	8.7	0.280
43811.4	43882.0	0.280	118.1	20.5	5.52	1.038	101.8	0.297	0.593	211.7	407.3	0.417	0.770A	-1.25	1.661	100.3	215.3	-6.6	0.309
5.03	7.36	128.6	-/+	50.4	0.9	79.5	0.0	0.283	1.263	5.4	-13.6	13.020	0.756	2.388	21.2	165.0	66.3	74.5	1.020
43660.0	43812.4	0.212	206.8	-28.5	-3.90	0.891	78.5	0.275	0.849	145.2	287.8	0.616D	1.083	0.67	1.259	76.4	71.3	2.8	0.292
43812.4	43882.0	0.292	118.1	21.7	6.10	1.041	102.4	0.301	0.596	213.3	407.4	0.417	0.775A	-1.84	1.663	100.4	214.8	-9.7	0.314
4.91	7.49	341.1	-/+	49.1	2.2	81.0	0.0	0.280	1.263	8.3	-23.0	13.259	0.694	2.513	26.7	170.0	66.0	74.1	0.975
43670.0	43813.3	0.207	214.6	-28.3	-3.23	0.881	79.1	0.282	0.837	148.8	283.3	0.601D	1.073	-0.22	1.252	75.6	75.4	-0.9	0.307
43813.3	43882.0	0.307	118.2	23.3	6.83	1.045	103.1	0.305	0.599	214.9	407.5	0.416	0.781A	-2.60	1.665	100.6	214.1	-13.4	0.321
4.84	7.67	640.5	-/+	48.1	4.0	82.5	0.0	0.278	1.263	10.7	-30.7	13.547	0.630	2.667	33.0	172.8	65.7	74.5	0.917

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
43790.0	43827.6	0.363	218.7	-19.3	-1.74	0.898	112.1	0.417	0.836	222.3	264.1	0.488D	1.185A	-4.48	1.255	66.6	108.8	-10.4	0.500
43827.6	43887.0	0.500	122.7	-17.4	-8.22	1.145	113.9	0.407	0.685	239.2	408.7	0.406	0.964A	12.15	1.727	103.6	200.4	43.7	0.512
7.65	13.14		-/-	15.1	0.0	105.4	0.0	0.275	1.263	32.9	26.9	16.995	0.237	7.586	30.9	169.1	63.1	74.4	1.562
43800.0	43830.4	0.481	215.7	-17.1	-1.51	1.006	118.6	0.479	1.005	242.3	278.8	0.524D	1.486A	-4.49	1.333	66.2	105.9	-10.2	0.540
43830.4	43882.0	0.540	123.9	-11.3	-5.75	1.178	116.3	0.443	0.723	243.9	408.9	0.403	1.043A	9.63	1.749	104.5	199.3	34.4	0.501
10.29	12.82		-/-	17.6	0.0	109.9	0.0	0.282	1.263	25.6	3.6	18.778	0.203	6.519	11.5	169.1	58.1	84.4	1.120
								ARRIVAL DATE = 2443884.0											
43640.0	43811.6	0.235	186.0	-34.0	-7.26	0.914	77.9	0.260	0.873	138.2	298.6	0.646D	1.100	4.47	1.272	78.5	64.2	20.9	0.272
43811.6	43884.0	0.272	119.7	19.9	5.23	1.034	101.4	0.296	0.591	210.4	411.6	0.416	0.766A	-0.98	1.642	101.1	212.8	-4.8	0.326
5.28	7.83	75.6	-/+	51.8	0.5	79.7	0.0	0.282	1.286	1.4	1.0	12.875	0.800	2.313	22.8	154.2	58.0	78.4	1.032
43650.0	43812.0	0.218	197.7	-30.0	-5.03	0.903	78.2	0.267	0.862	141.7	293.2	0.632D	1.092	2.02	1.265	77.5	67.6	9.0	0.277
43812.0	43884.0	0.276	119.7	20.1	5.38	1.036	101.6	0.297	0.592	211.0	411.6	0.416	0.768A	-1.14	1.643	101.1	212.7	-5.6	0.328
5.01	7.88	158.4	-/+	51.3	1.1	80.3	0.0	0.281	1.286	6.1	-12.6	12.958	0.774	2.356	20.6	164.5	57.8	74.7	1.013
43660.0	43813.0	0.210	206.7	-28.8	-3.92	0.892	78.6	0.273	0.850	145.1	288.6	0.618D	1.082	0.68	1.260	76.6	71.8	2.9	0.288
43813.0	43884.0	0.288	119.6	20.9	5.81	1.039	102.3	0.301	0.594	212.7	411.7	0.416	0.773A	-1.60	1.645	101.3	212.2	-7.8	0.332
4.89	8.00	314.7	-/+	49.8	2.1	81.9	0.0	0.279	1.286	8.9	-21.6	13.180	0.714	2.472	25.3	169.5	57.5	74.2	0.980
43670.0	43814.0	0.204	214.6	-28.5	-3.23	0.882	79.2	0.279	0.839	148.7	284.3	0.605D	1.073	-0.23	1.253	75.8	76.0	-0.9	0.302
43814.0	43884.0	0.302	119.6	21.9	6.36	1.043	103.0	0.305	0.597	214.4	411.8	0.415	0.780A	-2.18	1.648	101.4	211.6	-10.5	0.338
4.81	8.17	519.0	-/+	48.3	3.3	83.6	0.0	0.276	1.286	11.3	-28.8	13.448	0.650	2.614	31.0	172.3	57.3	74.6	0.940
43680.0	43815.0	0.200	221.7	-28.6	-2.76	0.871	79.9	0.285	0.827	152.3	280.0	0.591D	1.063	-0.91	1.247	75.0	80.0	-3.5	0.316
43815.0	43884.0	0.316	119.8	23.1	6.99	1.048	103.7	0.309	0.600	216.1	411.8	0.415	0.786A	-2.83	1.650	101.5	211.1	-13.4	0.345
4.74	8.36	774.2	-/+	47.0	4.7	85.2	0.0	0.274	1.286	13.5	-35.1	13.740	0.592	2.773	36.5	173.7	57.1	75.1	0.893
								ARRIVAL DATE = 2443886.0											
43640.0	43812.3	0.236	185.3	-35.0	-7.54	0.915	78.0	0.258	0.874	138.1	299.7	0.649D	1.100	4.73	1.272	78.8	64.8	22.4	0.270
43812.3	43886.0	0.270	121.8	19.9	5.22	1.032	101.2	0.296	0.589	209.6	415.4	0.415	0.764A	-1.01	1.628	101.8	211.3	-4.6	0.350
5.29	8.50	163.2	-/+	52.9	1.2	80.9	0.0	0.280	1.308	1.9	2.3	12.837	0.812	2.293	23.9	152.7	50.8	79.0	1.012
43650.0	43812.6	0.217	197.5	-30.5	-5.10	0.904	78.3	0.265	0.863	141.6	294.0	0.634D	1.091	2.08	1.266	77.7	68.1	9.5	0.273
43812.6	43886.0	0.273	121.7	20.1	5.31	1.033	101.3	0.297	0.590	210.1	415.4	0.414	0.765A	-1.11	1.629	101.8	211.2	-5.0	0.351
5.00	8.53	236.7	-/+	52.7	1.7	81.3	0.0	0.280	1.308	6.9	-11.8	12.892	0.795	2.321	20.3	163.8	50.7	74.8	0.996
43660.0	43813.6	0.208	206.7	-29.0	-3.94	0.893	78.8	0.270	0.852	145.1	289.5	0.621D	1.082	0.70	1.260	76.9	72.3	3.0	0.284
43813.6	43886.0	0.284	121.6	20.6	5.64	1.036	102.0	0.301	0.592	211.7	415.5	0.414	0.770A	-1.48	1.631	102.0	210.9	-6.6	0.356
4.87	8.65	363.2	-/+	51.1	2.5	82.9	0.0	0.277	1.308	9.7	-20.5	13.100	0.735	2.429	24.3	168.9	50.5	74.3	0.969
43670.0	43814.7	0.202	214.7	-28.6	-3.22	0.883	79.4	0.276	0.840	148.6	285.3	0.609D	1.072	-0.23	1.254	76.1	76.5	-0.9	0.297
43814.7	43886.0	0.297	121.5	21.2	6.07	1.041	102.7	0.305	0.595	213.5	415.5	0.413	0.777A	-1.94	1.633	102.1	210.4	-8.6	0.361
4.78	8.81	512.3	-/+	49.3	3.3	84.7	0.0	0.275	1.308	12.0	-27.3	13.352	0.672	2.563	29.5	171.8	50.2	74.7	0.940
43680.0	43815.8	0.197	221.8	-28.7	-2.74	0.873	80.1	0.282	0.829	152.2	281.1	0.595D	1.062	-0.92	1.248	75.3	80.6	-3.6	0.311
43815.8	43886.0	0.311	121.6	22.0	6.57	1.045	103.5	0.310	0.598	215.3	415.5	0.413	0.783A	-2.48	1.636	102.3	209.9	-10.8	0.368
4.71	9.00	690.6	-/+	47.6	4.3	86.4	0.0	0.273	1.308	14.2	-33.2	13.629	0.613	2.712	34.6	173.1	50.1	75.2	0.908
43690.0	43816.8	0.193	228.1	-28.9	-2.39	0.862	80.9	0.289	0.817	155.9	277.0	0.581D	1.053	-1.47	1.241	74.5	84.5	-5.4	0.325
43816.8	43886.0	0.325	121.8	22.9	7.14	1.049	104.2	0.314	0.601	217.0	415.6	0.412	0.790A	-3.08	1.638	102.4	209.4	-13.2	0.375
4.64	9.21	906.8	-/+	46.1	5.4	88.1	0.0	0.272	1.308	16.4	-38.6	13.922	0.561	2.873	39.6	173.5	50.0	75.8	0.871
								ARRIVAL DATE = 2443888.0											
43640.0	43813.2	0.238	184.3	-36.3	-7.93	0.916	78.1	0.255	0.876	137.9	300.9	0.652D	1.099	5.10	1.273	79.0	65.5	24.5	0.268
43813.2	43888.0	0.268	124.3	20.1	5.24	1.029	100.9	0.298	0.587	208.7	418.7	0.412	0.762A	-1.09	1.616	102.4	210.9	-4.6	0.378
5.32	9.29	281.4	-/+	54.1	2.0	82.2	0.0	0.278	1.328	2.4	4.0	12.805	0.822	2.277	25.6	150.7	44.8	79.9	0.985
43650.0	43813.2	0.216	197.3	-30.9	-5.19	0.905	78.4	0.263	0.864	141.5	295.0	0.637D	1.091	2.16	1.267	77.9	68.6	10.0	0.269
43813.2	43888.0	0.269	124.2	20.1	5.26	1.029	101.0	0.298	0.587	208.8	418.7	0.412	0.762A	-1.11	1.617	102.4	210.9	-4.6	0.378
4.98	9.28	354.5	-/+	54.5	2.5	82.4	0.0	0.278	1.328	7.8	-11.1	12.819	0.818	2.284	20.2	163.0	44.7	74.9	0.969
43660.0	43814.3	0.207	206.6	-29.3	-3.96	0.894	78.9	0.268	0.853	145.0	290.5	0.625D	1.081	0.72	1.261	77.1	72.8	3.2	0.280
43814.3	43888.0	0.279	124.0	20.4	5.53	1.033	101.6	0.301	0.589	210.4	418.7	0.412	0.767A	-1.43	1.619	102.6	210.6	-5.9	0.382
4.84	9.40	462.7	-/+	52.9	3.2	84.0	0.0	0.276	1.328	10.6	-19.7	13.014	0.758	2.385	23.6	168.4	44.6	74.4	0.948
43670.0	43815.4	0.200	214.7	-28.8	-3.22	0.884	79.5	0.273	0.842	148.5	286.3	0.612D	1.071	-0.24	1.255	76.3	77.1	-1.0	0.292
43815.4	43888.0	0.292	123.9	20.8	5.89	1.037	102.4	0.306	0.592	212.3	418.8	0.411	0.773A	-1.82	1.621	102.7	210.2	-7.5	0.387
4.74	9.56	576.5	-/+	50.7	3.8	85.8	0.0	0.274	1.328	12.9	-26.2	13.255	0.695	2.511	28.3	171.2	44.4	74.8	0.927
43680.0	43816.6	0.195	221.8	-28.8	-2.71	0.874	80.2	0.278	0.831	152.1	282.3	0.599D	1.062	-0.94	1.249	75.6	81.2	-3.7	0.305
43816.6	43888.0	0.305	123.9	21.4	6.29	1.041	103.2	0.310	0.595	214.1	418.8	0.410	0.779A	-2.27	1.624	102.9	209.8	-9.2	0.394
4.67	9.73	703.4	-/+	48.7	4.4	87.7	0.0	0.272	1.328	15.1	-31.7	13.517	0.636	2.651	33.0	172.6	44.3	75.3	0.905
43690.0	43817.6	0.190	228.2	-29.0	-2.36	0.864	81.1	0.284	0.819	155.9	278.2	0.586D	1.052	-1.49	1.243	74.9	85.2	-5.6	0.319
43817.6	43888.0	0.319	124.0	21.9	6.74	1.045	103.9	0.315	0.598	215.9	418.8	0.410	0.786A	-2.77	1.626	103.0	209.4	-11.0	0.400
4.60	9.93	851.5	-/+	46.9	5.1	89.4	0.0	0.271	1.328	17.2	-36.7	13.794	0.582	2.803	37.6	173.0	44.2	75.9	0.880
								ARRIVAL DATE = 2443890.0											
43640.0	43814.3	0.241	182.8	-38.2	-8.54	0.917	78.3	0.252	0.877	137.8	302.5	0.657D	1.098	5.69	1.274	79.4	66.5	27.6	0.268
43814.3	43890.0	0.268	127.1	20.3	5.29	1.026	100.8	0.300	0.584	207.8	421.6	0.409	0.759A	-1.22	1.608	103.0	211.4	-4.7	0.408
5.37	10.14	430.5	-/+	55.3	3.1	94.0	0.0	0.276	1.345	2.7	6.5	12.794	0.826	2.271	28.3	147.7	39.7	81.4	0.953
43650.0	43814.0	0.215	197.1	-31.5	-5.29	0.905	78.5	0.260	0.865	141.4	296.0	0.640D	1.090	2.25	1.268	78.2	69.1	10.6	0.265
43814.0	43890.0	0.265	127.3	20.2	5.22	1.025	100.5	0.299	0.584	207.2	421.6	0.409	0.758A	-1.13	1.607	103.0	211.4	-4.4	0.407
4.96	10.11	507.4	-/+	56.6	3.7	83.5	0.0	0.277	1.345	8.8	-10.4	12.741	0.844	2.244	20.2	162.2	39.7	75.0	0.936
43660.0	43815.0	0.205	206.6	-29.6	-3.99	0.895	79.0	0.265	0.854	144.9	291.6	0.628D	1.081	0.74	1.262	77.3	73.3	3.3	0.275
43815.0	43890.0	0.275	127.0	20.4	5.45	1.028	101.2	0.302	0.586	208.9	421.6	0.409	0.763A	-1.41	1.609	103.1	211.2	-5.4	0.411
4.81	10.22	604.1	-/+	54.9	4.2	85.2	0.0	0.275	1.345	11.6	-18.9	12.923	0.785	2.338	23.0	167.7	39.6	74.5	0.918

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL LEG	DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COIST1	SMA SMA COIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
43670.0	43816.2	0.198	214.7	-29.0	-3.21	0.886	79.6	0.270	0.843	148.4	287.5	0.616D	1.071	-0.24	1.256	76.6	77.7	-1.0	0.287
43816.2	43890.0	0.287	126.7	20.7	5.75	1.032	102.0	0.306	0.588	210.8	421.6	0.408	0.768A	-1.77	1.612	103.2	210.9	-6.7	0.416
4.71	10.37	691.7	-/+	52.7	4.6	87.1	0.0	0.273	1.345	13.8	-25.2	13.152	0.721	2.457	27.3	170.5	39.5	74.9	0.904
43680.0	43817.4	0.192	221.9	-28.9	-2.68	0.876	80.3	0.275	0.832	152.0	283.5	0.604D	1.061	-0.96	1.250	75.9	81.9	-3.9	0.300
43817.4	43890.0	0.299	126.7	21.0	6.09	1.035	102.8	0.310	0.591	212.6	421.6	0.408	0.775A	-2.16	1.614	103.4	210.6	-8.0	0.422
4.63	10.54	781.7	-/+	50.4	5.0	89.0	0.0	0.271	1.345	16.0	-30.4	13.403	0.660	2.590	31.7	171.9	39.4	75.4	0.889
43690.0	43818.5	0.187	228.2	-29.0	-2.31	0.866	81.2	0.280	0.821	155.8	279.5	0.591D	1.052	-1.51	1.244	75.2	85.9	-5.8	0.313
43818.5	43890.0	0.312	126.7	21.4	6.46	1.041	103.5	0.315	0.594	214.4	421.6	0.407	0.782A	-2.57	1.617	103.6	210.3	-9.5	0.428
4.56	10.73	881.2	-/+	48.4	5.4	90.8	0.0	0.270	1.345	18.1	-35.1	13.666	0.606	2.732	35.9	172.4	39.3	75.9	0.874
43700.0	43819.5	0.182	233.7	-29.1	-2.05	0.856	82.3	0.287	0.810	159.7	275.6	0.578D	1.042	-1.96	1.237	74.5	89.7	-7.2	0.326
43819.5	43890.0	0.326	126.8	21.8	6.86	1.045	104.3	0.320	0.597	216.2	421.6	0.406	0.789A	-3.02	1.619	103.7	209.9	-11.0	0.435
4.50	10.93	997.4	-/+	46.5	5.9	92.5	0.0	0.269	1.345	20.2	-39.4	13.938	0.558	2.882	40.0	172.3	39.3	76.4	0.856
ARRIVAL DATE = 2443892.0																			
43640.0	43816.1	0.252	179.3	-41.7	-9.90	0.918	78.5	0.247	0.880	137.5	305.2	0.663D	1.097	7.02	1.276	80.0	68.5	34.3	0.273
43816.1	43892.0	0.273	130.3	20.5	5.45	1.023	100.9	0.304	0.582	207.6	424.1	0.405	0.760A	-1.51	1.603	103.6	212.4	-5.3	0.443
5.55	11.14	654.3	-/+	55.7	4.6	87.0	0.0	0.273	1.361	1.4	11.9	12.885	0.797	2.318	34.4	141.6	35.4	85.7	0.908
43650.0	43814.8	0.214	196.7	-32.2	-5.41	0.906	78.6	0.257	0.866	141.3	297.2	0.643D	1.089	2.36	1.269	78.4	69.7	11.3	0.260
43814.8	43892.0	0.260	130.7	20.4	5.19	1.019	100.0	0.300	0.580	205.5	424.1	0.406	0.754A	-1.18	1.601	103.4	212.7	-4.2	0.437
4.95	10.99	693.4	-/+	59.1	5.1	84.8	0.0	0.275	1.361	9.9	-9.7	12.660	0.873	2.203	20.4	161.2	35.5	75.1	0.897
43660.0	43815.8	0.203	206.5	-30.0	-4.02	0.897	79.1	0.262	0.856	144.8	292.8	0.631D	1.080	0.77	1.263	77.6	73.9	3.5	0.270
43815.8	43892.0	0.269	130.4	20.5	5.38	1.022	100.7	0.303	0.582	207.1	424.1	0.406	0.758A	-1.42	1.602	103.5	212.5	-5.0	0.441
4.78	11.10	784.6	-/+	57.4	5.6	86.4	0.0	0.273	1.361	12.7	-18.1	12.827	0.815	2.288	22.4	167.0	35.4	74.6	0.881
43670.0	43817.0	0.195	214.7	-29.2	-3.20	0.887	79.7	0.266	0.845	148.3	288.7	0.620D	1.070	-0.25	1.258	76.9	78.3	-1.1	0.281
43817.0	43892.0	0.281	130.0	20.6	5.64	1.026	101.5	0.307	0.584	209.0	424.0	0.405	0.764A	-1.74	1.605	103.7	212.3	-6.1	0.446
4.68	11.24	851.2	-/+	55.1	5.8	88.4	0.0	0.272	1.361	14.9	-24.2	13.045	0.750	2.401	26.3	169.8	35.3	74.9	0.872
43680.0	43818.2	0.189	221.9	-29.0	-2.65	0.877	80.5	0.271	0.834	152.0	284.8	0.608D	1.061	-0.98	1.252	76.2	82.5	-4.1	0.293
43818.2	43892.0	0.293	129.8	20.8	5.93	1.030	102.3	0.311	0.587	210.9	424.0	0.404	0.770A	-2.09	1.607	103.8	212.0	-7.2	0.452
4.59	11.41	910.8	-/+	52.6	6.0	90.3	0.0	0.270	1.361	17.0	-29.2	13.284	0.688	2.526	30.4	171.2	35.3	75.5	0.864
43690.0	43819.4	0.184	228.3	-29.0	-2.27	0.868	81.4	0.276	0.824	155.7	280.9	0.596D	1.051	-1.54	1.246	75.5	86.6	-6.1	0.306
43819.4	43892.0	0.306	129.8	21.0	6.25	1.035	103.1	0.316	0.590	212.8	424.0	0.404	0.776A	-2.46	1.610	104.0	211.8	-8.4	0.458
4.52	11.59	972.9	-/+	50.3	6.1	92.2	0.0	0.269	1.361	19.1	-33.6	13.535	0.632	2.661	34.3	171.8	35.2	76.0	0.856
ARRIVAL DATE = 2443894.0																			
43650.0	43815.6	0.213	196.4	-32.9	-5.56	0.907	78.7	0.255	0.868	141.2	298.5	0.647D	1.089	2.50	1.269	78.7	70.3	12.2	0.256
43815.6	43894.0	0.256	134.8	20.6	5.16	1.013	99.4	0.302	0.576	203.5	426.2	0.402	0.750A	-1.23	1.597	103.8	214.5	-4.1	0.470
4.93	11.92	917.4	-/+	62.1	6.9	86.2	0.0	0.273	1.374	11.2	-8.9	12.575	0.905	2.160	20.8	160.1	31.8	75.2	0.851

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THETI THETI RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
									ARRIVAL DATE = 2444576.0										
44150.0	44439.7	0.369	351.1	6.3	3.79	0.966	69.7	0.352	0.939	120.4	428.5	0.608	1.269	3.97	1.297	106.2	198.2	13.1	0.380
44439.7	44576.0	0.380	163.9	-2.7	-1.02	1.079	71.1	0.354	0.632	132.8	369.8	0.408	0.856	4.80	1.816	92.6	241.7	21.3	0.417
7.78	10.42	980.6	+/+	37.6	5.0	6.6	0.0	0.431	1.264	276.1	25.0	15.108	0.410	3.562	154.1	17.4	121.4	90.5	0.863
44160.0	44444.9	0.358	359.3	10.7	3.96	0.965	70.5	0.341	0.932	120.8	427.4	0.614	1.249	3.55	1.294	105.5	207.2	12.2	0.365
44444.9	44576.0	0.365	170.9	-3.2	-1.14	1.072	72.0	0.346	0.626	134.6	363.4	0.410	0.842	5.00	1.812	90.9	248.1	20.6	0.448
7.54	11.29	879.8	+/+	39.2	4.6	14.9	0.0	0.468	1.264	283.4	23.2	14.778	0.444	3.365	156.1	17.2	127.4	91.4	0.879
44170.0	44450.3	0.346	7.7	15.0	4.06	0.964	71.2	0.330	0.925	121.3	426.4	0.619	1.230	3.04	1.291	105.0	216.3	10.8	0.352
44450.3	44576.0	0.352	177.9	-3.8	-1.32	1.065	72.9	0.339	0.620	136.7	356.9	0.4100	0.829	5.26	1.807	89.2	253.6	20.2	0.480
7.31	12.22	807.8	+/+	40.9	4.4	23.4	0.0	0.507	1.264	290.7	21.2	14.487	0.478	3.194	158.3	16.8	132.4	92.5	0.891
44180.0	44455.7	0.335	16.3	19.0	4.07	0.963	71.9	0.321	0.918	122.0	425.7	0.624	1.213	2.46	1.288	104.5	225.3	9.1	0.340
44455.7	44576.0	0.340	184.7	-4.9	-1.63	1.057	73.7	0.333	0.613	138.9	350.6	0.4090	0.817	5.63	1.802	87.7	258.3	20.1	0.514
7.08	13.20	781.7	+/+	42.8	4.4	32.0	0.0	0.547	1.264	298.0	19.3	14.230	0.513	3.047	160.4	16.1	136.5	93.7	0.895
44190.0	44461.2	0.324	25.2	22.7	4.00	0.961	72.5	0.312	0.911	122.8	425.2	0.627	1.196	1.83	1.286	104.1	234.3	6.9	0.329
44461.2	44576.0	0.329	191.4	-6.7	-2.19	1.049	74.5	0.330	0.606	141.3	344.3	0.4060	0.805	6.26	1.797	86.1	262.5	20.8	0.550
6.86	14.25	834.8	+/+	44.9	4.9	40.7	0.0	0.590	1.264	305.4	18.2	14.011	0.546	2.923	161.8	15.2	139.8	95.0	0.884
									ARRIVAL DATE = 2444578.0										
44130.0	44429.2	0.392	334.6	-2.7	3.18	0.968	68.1	0.377	0.952	119.9	431.1	0.593	1.311	4.50	1.303	107.6	180.2	13.7	0.411
44429.2	44578.0	0.411	149.5	-0.8	-0.34	1.094	69.3	0.373	0.645	129.5	390.0	0.405	0.886	4.37	1.793	98.0	219.6	22.9	0.348
8.27	8.45	995.3	+/+	33.6	4.7	350.1	0.0	0.365	1.293	260.4	25.5	15.810	0.351	3.995	153.2	17.0	94.6	89.7	0.861
44140.0	44434.1	0.378	342.9	1.8	3.47	0.967	69.1	0.361	0.946	120.0	429.1	0.604	1.287	4.26	1.300	106.6	189.0	13.7	0.390
44434.1	44578.0	0.390	156.4	-0.9	-0.35	1.088	70.5	0.359	0.640	130.7	383.5	0.411	0.870	4.42	1.789	96.1	229.6	22.3	0.362
7.95	8.83	831.7	+/+	35.4	4.1	357.8	0.0	0.394	1.293	267.8	24.3	15.339	0.389	3.702	154.5	17.6	103.8	90.0	0.888
44150.0	44439.0	0.364	351.2	6.3	3.70	0.966	70.0	0.347	0.939	120.2	427.4	0.613	1.265	3.92	1.297	105.8	197.9	13.3	0.372
44439.0	44578.0	0.372	163.3	-1.0	-0.37	1.082	71.5	0.346	0.635	132.2	377.2	0.415	0.855	4.47	1.786	94.4	238.1	21.4	0.380
7.66	9.35	674.2	+/+	37.2	3.5	5.6	0.0	0.426	1.293	274.9	22.6	14.924	0.428	3.451	156.2	18.0	111.7	90.6	0.916
44160.0	44444.1	0.351	359.4	10.7	3.87	0.965	70.9	0.335	0.932	120.6	425.9	0.620	1.244	3.49	1.294	105.0	206.8	12.4	0.355
44444.1	44578.0	0.355	170.1	-1.2	-0.40	1.076	72.5	0.336	0.629	133.9	370.9	0.418	0.841	4.54	1.782	92.7	245.4	20.5	0.402
7.40	9.99	528.5	+/+	38.9	2.9	13.7	0.0	0.462	1.293	282.0	20.4	14.560	0.469	3.237	158.5	18.0	118.6	91.6	0.942
44170.0	44449.2	0.339	7.8	15.1	3.96	0.964	71.6	0.323	0.925	121.2	424.7	0.626	1.224	2.98	1.291	104.4	215.7	11.0	0.340
44449.2	44578.0	0.340	176.9	-1.3	-0.44	1.070	73.4	0.327	0.624	135.9	364.7	0.419	0.828	4.61	1.778	91.2	251.6	19.6	0.427
7.15	10.68	405.7	+/+	40.6	2.3	21.8	0.0	0.499	1.293	289.0	17.9	14.235	0.512	3.050	161.2	17.7	124.5	92.7	0.965
44180.0	44454.4	0.326	16.3	19.1	3.98	0.963	72.4	0.312	0.918	121.8	423.6	0.631	1.205	2.41	1.288	103.8	224.6	9.3	0.326
44454.4	44578.0	0.326	183.5	-1.6	-0.51	1.063	74.3	0.320	0.618	138.0	358.6	0.4200	0.816	4.71	1.773	89.7	256.9	18.8	0.453
6.91	11.43	315.0	+/+	42.4	1.9	30.0	0.0	0.538	1.293	296.0	15.1	13.945	0.557	2.886	164.3	17.2	129.6	93.9	0.983
44190.0	44459.6	0.314	25.2	22.8	3.91	0.961	73.1	0.302	0.912	122.6	422.6	0.636	1.187	1.78	1.286	103.3	233.4	7.1	0.313
44459.6	44578.0	0.314	189.9	-2.0	-0.62	1.056	75.1	0.315	0.612	140.3	352.7	0.4190	0.804	4.85	1.769	88.2	261.5	18.2	0.479
6.66	12.19	265.5	+/+	44.4	1.6	38.3	0.0	0.578	1.293	303.0	12.2	13.684	0.603	2.742	167.5	16.7	133.9	95.1	0.992
44200.0	44464.8	0.301	34.4	26.1	3.78	0.959	73.8	0.293	0.905	123.6	421.8	0.640	1.170	1.13	1.283	102.8	242.1	4.7	0.302
44464.8	44578.0	0.302	196.0	-2.8	-0.82	1.049	76.0	0.311	0.605	142.8	346.9	0.4170	0.793	5.06	1.764	86.9	265.5	17.9	0.506
6.42	12.97	264.7	+/+	46.7	1.7	46.5	0.0	0.618	1.293	310.1	9.4	13.449	0.650	2.615	170.5	16.3	137.5	96.3	0.992
44210.0	44469.9	0.288	44.0	28.8	3.57	0.957	74.5	0.284	0.899	124.8	421.0	0.644	1.154	0.45	1.281	102.3	250.7	1.9	0.291
44469.9	44578.0	0.291	201.8	-4.2	-1.21	1.042	76.8	0.308	0.599	145.4	341.3	0.4150	0.783	5.48	1.759	85.6	269.0	18.3	0.534
6.17	13.77	321.3	+/+	49.2	2.1	54.6	0.0	0.658	1.293	317.2	7.5	13.240	0.699	2.503	172.5	16.2	140.4	97.4	0.979
44220.0	44475.2	0.275	53.9	30.8	3.30	0.954	75.1	0.276	0.892	126.1	420.6	0.646	1.139	-0.21	1.279	102.0	259.2	-0.9	0.284
44475.2	44578.0	0.283	207.3	-9.0	-2.53	1.034	77.7	0.306	0.592	148.2	335.8	0.4110	0.774	6.82	1.754	84.4	272.5	21.3	0.570
5.94	14.82	517.0	+/+	52.2	3.5	63.0	0.0	0.699	1.293	324.3	9.4	13.090	0.737	2.425	169.2	16.2	142.0	98.6	0.938
									ARRIVAL DATE = 2444580.0										
44130.0	44429.1	0.392	334.6	-2.7	3.16	0.968	68.1	0.376	0.953	119.9	430.9	0.594	1.311	4.49	1.303	107.6	180.1	13.7	0.410
44429.1	44580.0	0.410	149.6	0.4	0.17	1.095	69.4	0.372	0.646	129.2	396.5	0.406	0.886	4.32	1.765	99.7	213.7	22.4	0.344
8.25	8.34	834.5	+/+	33.0	3.9	350.0	0.0	0.364	1.320	260.0	23.6	15.782	0.353	3.978	154.9	17.0	82.9	90.0	0.888
44140.0	44433.8	0.376	343.0	1.7	3.43	0.967	69.2	0.359	0.946	119.9	428.7	0.606	1.286	4.24	1.300	106.5	188.9	13.8	0.387
44433.8	44580.0	0.387	156.3	0.5	0.17	1.090	70.6	0.355	0.642	130.4	390.2	0.414	0.870	4.30	1.762	97.8	224.0	22.1	0.347
7.91	8.42	640.4	+/+	34.9	3.2	357.4	0.0	0.392	1.320	267.1	22.3	15.267	0.395	3.658	156.2	17.8	92.5	90.3	0.922
44150.0	44438.6	0.361	351.3	6.3	3.65	0.966	70.2	0.344	0.939	120.1	426.6	0.616	1.262	3.88	1.297	105.5	197.7	13.3	0.367
44438.6	44580.0	0.367	163.0	0.5	0.18	1.085	71.8	0.341	0.637	131.8	384.0	0.420	0.854	4.27	1.758	96.0	233.3	21.5	0.356
7.60	8.68	454.4	+/+	36.7	2.4	5.0	0.0	0.424	1.320	274.1	20.5	14.814	0.440	3.386	158.0	18.3	101.1	90.9	0.956
44160.0	44443.5	0.347	359.5	10.7	3.80	0.965	71.1	0.331	0.932	120.5	424.9	0.624	1.240	3.45	1.294	104.7	206.5	12.5	0.348
44443.5	44580.0	0.349	169.6	0.6	0.19	1.079	72.8	0.329	0.632	133.4	377.9	0.424	0.840	4.25	1.755	94.4	241.4	20.5	0.370
7.31	9.07	281.8	+/+	38.5	1.6	12.8	0.0	0.458	1.320	280.9	18.1	14.416	0.488	3.153	160.4	18.5	108.7	91.7	0.990
44170.0	44448.5	0.334	7.8	15.1	3.89	0.964	71.9	0.318	0.925	121.0	423.4	0.631	1.220	2.94	1.291	104.0	215.4	11.2	0.332
44448.5	44580.0	0.332	176.2	0.6	0.20	1.073	73.8	0.319	0.627	135.3	371.9	0.427	0.827	4.22	1.751	92.9	248.4	19.4	0.387
7.05	9.55	132.1	+/+	40.3	0.8	20.7	0.0	0.494	1.320	287.7	15.3	14.065	0.537	2.954	163.3	18.4	115.4	92.9	1.021
44180.0	44453.5	0.320	16.4	19.2	3.91	0.963	72.7	0.307	0.919	121.7	422.1	0.637	1.200	2.37	1.288	103.3	224.2	9.4	0.317
44453.5	44580.0	0.317	182.6	0.7	0.22	1.067	74.7	0.311	0.621	137.3	366.0	0.428	0.814	4.18	1.747	91.4	254.4	18.3	0.406
6.79	10.08	16.3	+/+	42.3	0.1	28.6	0.0	0.531	1.320	294.4	12.1	13.750	0.590	2.779	166.7	18.1	121.2	94.1	1.046
44190.0	44458.6	0.307	25.2	22.9	3.85	0.961	73.5	0.296	0.912	122.6	420.9	0.642	1.182	1.75	1.286	102.7	232.9	7.3	0.303
44458.6	44580.0	0.303	188.8	0.9	0.26	1.061	75.6	0.304	0.616	139.6	360.2	0.429	0.803	4.13	1.743	90.1	259.6	17.2	0.426
6.53	10.65		+/+	44.4	0.0	36.6	0.0	0.570	1.320	301.4	8.5	13.423	0.646	2.646	170.4	17.8	126.3	95.1	1.063
44200.0	44463.6	0.294	34.3	26.3	3.73	0.959	74.2	0.286	0.905	123.6	419.7	0.647	1.164	1.11	1.283	102.2	241.5	4.8	0.290
44463.6	44580.0	0.290	194.7	1.1	0.31	1.055	76.5	0.298	0.610	142.0	354.7	0.4290	0.792	4.07	1.739	88.8	264.0	16.1	0.446
6.28	11.23		+/+	46.8	0.0	44.5	0.0	0.608	1.320	308.3	4.6	13.148	0.704	2.518	174.4	17.6	130.7	96.2	1.069

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44210.0	44468.5	0.279	43.8	29.1	3.55	0.957	74.9	0.276	0.899	124.8	418.6	0.651	1.147	0.44	1.281	101.6	249.8	2.0	0.278
44468.5	44580.0	0.278	200.3	1.5	0.40	1.049	77.4	0.294	0.605	144.5	349.4	0.427D	0.783	3.97	1.735	87.6	267.8	14.9	0.465
6.02	11.79		+/+	49.5	0.0	52.3	0.0	0.646	1.320	315.1	0.6	12.941	0.766	2.387	178.0	17.7	134.5	97.2	1.063
44220.0	44473.2	0.265	53.6	31.2	3.31	0.955	75.7	0.266	0.893	126.3	417.6	0.655	1.131	-0.21	1.279	101.1	258.0	-1.0	0.267
44473.2	44580.0	0.267	205.4	2.2	0.57	1.043	78.2	0.290	0.599	147.1	344.4	0.425D	0.774	3.79	1.730	86.5	271.1	13.6	0.484
5.76	12.33	34.2	+/+	52.7	0.2	59.9	0.0	0.683	1.320	321.8	-3.5	12.780	0.831	2.264	176.4	18.2	137.9	98.1	1.042
44230.0	44477.9	0.249	63.5	32.7	3.04	0.952	76.5	0.257	0.887	128.0	416.5	0.659	1.115	-0.83	1.277	100.6	265.9	-4.1	0.257
44477.9	44580.0	0.257	210.0	3.9	0.97	1.037	79.1	0.288	0.594	149.7	339.7	0.423D	0.765	3.37	1.726	85.5	273.8	11.7	0.501
5.50	12.81	201.0	+/+	56.4	1.5	67.2	0.0	0.719	1.320	328.7	-8.4	12.596	0.897	2.170	171.6	19.1	141.0	98.4	1.002
44250.0	44486.8	0.218	83.1	33.5	2.41	0.944	78.1	0.240	0.875	132.3	414.7	0.665	1.085	-1.93	1.273	99.8	280.9	-10.1	0.241
44486.8	44580.0	0.241	217.7	-9.8	-2.31	1.024	80.8	0.286	0.584	155.2	331.0	0.417D	0.751	6.63	1.717	83.7	279.4	20.7	0.558
5.01	14.47	378.0	+/-	62.1	3.0	81.4	0.0	0.788	1.320	340.8	-0.0	12.307	1.022	2.027	168.4	21.8	142.5	100.6	0.959
44260.0	44490.3	0.200	92.1	33.3	2.12	0.939	79.1	0.230	0.870	135.2	412.9	0.670	1.069	-2.38	1.271	99.1	287.4	-13.1	0.230
44490.3	44580.0	0.230	220.3	-4.4	-0.99	1.020	81.6	0.285	0.580	157.6	327.8	0.414D	0.745	5.31	1.714	83.0	280.6	16.3	0.560
4.75	14.54	543.5	+/-	66.7	4.5	87.0	0.0	0.815	1.320	347.1	-7.4	12.122	1.121	1.937	166.9	24.1	145.6	99.8	0.917
44270.0	44493.8	0.183	100.3	32.4	1.83	0.934	80.0	0.221	0.864	138.4	411.7	0.673	1.056	-2.76	1.269	98.7	293.7	-15.8	0.222
44493.8	44580.0	0.222	222.4	-2.9	-0.63	1.015	82.4	0.286	0.576	160.1	324.6	0.411D	0.740	4.94	1.710	82.4	282.0	14.8	0.570
4.52	14.84	764.2	+/-	71.2	6.6	92.7	0.0	0.842	1.320	352.8	-10.3	11.990	1.203	1.873	164.1	26.0	147.5	99.7	0.864
44280.0	44497.1	0.167	107.6	31.1	1.55	0.929	81.0	0.213	0.860	142.1	410.6	0.676	1.043	-3.06	1.267	98.3	299.5	-18.1	0.215
44497.1	44580.0	0.215	224.0	-2.2	-0.48	1.010	83.3	0.286	0.572	162.6	321.8	0.409D	0.736	4.77	1.707	81.8	283.4	14.0	0.581
4.31	15.15	990.8	+/-	75.6	8.9	98.1	0.0	0.867	1.320	358.0	-11.8	11.877	1.282	1.819	161.7	27.8	149.0	99.8	0.810

ARRIVAL DATE = 2444582.0

44120.0	44424.8	0.412	325.9	-7.0	2.89	0.970	66.8	0.398	0.959	120.1	434.0	0.578	1.341	4.69	1.306	109.0	171.5	13.3	0.439
44424.8	44582.0	0.440	143.3	1.5	0.66	1.101	67.8	0.393	0.651	128.4	408.8	0.395	0.907	4.40	1.743	103.2	197.9	20.7	0.369
8.70	9.03	949.3	+/+	30.3	4.2	343.1	0.0	0.341	1.343	252.7	22.5	16.472	0.307	4.422	155.8	15.7	62.2	90.4	0.867
44130.0	44429.2	0.393	334.6	-2.7	3.18	0.968	68.1	0.377	0.952	119.9	431.1	0.593	1.312	4.51	1.303	107.7	180.2	13.7	0.411
44429.2	44582.0	0.412	149.8	1.6	0.65	1.096	69.3	0.372	0.647	129.1	402.5	0.406	0.888	4.32	1.740	101.2	208.2	21.4	0.353
8.28	8.59	727.7	+/+	32.3	3.4	350.2	0.0	0.365	1.343	259.8	21.8	15.821	0.350	4.002	156.4	16.9	71.8	90.3	0.906
44140.0	44433.8	0.375	343.0	1.7	3.43	0.967	69.2	0.359	0.946	119.9	428.6	0.606	1.285	4.23	1.300	106.5	188.9	13.8	0.387
44433.8	44582.0	0.387	156.4	1.7	0.65	1.091	70.7	0.354	0.643	130.1	396.4	0.415	0.870	4.24	1.737	99.3	218.2	21.5	0.346
7.90	8.38	509.8	+/+	34.3	2.5	357.4	0.0	0.392	1.343	266.8	20.4	15.258	0.396	3.653	157.7	17.9	81.2	90.5	0.946
44150.0	44438.5	0.359	351.3	6.3	3.62	0.966	70.3	0.343	0.939	120.1	426.3	0.617	1.261	3.87	1.297	105.4	197.6	13.4	0.365
44438.5	44582.0	0.365	162.9	1.9	0.66	1.086	71.9	0.339	0.638	131.4	390.3	0.422	0.854	4.16	1.734	97.5	227.7	21.1	0.345
7.57	8.37	301.5	+/+	36.2	1.6	4.7	0.0	0.423	1.343	273.6	18.5	14.767	0.445	3.358	159.6	18.5	90.0	91.1	0.986
44160.0	44443.2	0.344	359.5	10.7	3.76	0.965	71.2	0.328	0.932	120.5	424.3	0.626	1.238	3.43	1.294	104.5	206.4	12.6	0.345
44443.2	44582.0	0.345	169.3	2.1	0.69	1.081	73.0	0.325	0.634	133.0	384.4	0.428	0.840	4.06	1.731	95.9	236.3	20.4	0.350
7.26	8.51	110.1	+/+	38.2	0.6	12.3	0.0	0.456	1.343	280.2	16.1	14.337	0.498	3.108	162.0	18.8	98.1	92.0	1.026
44170.0	44448.1	0.330	7.9	15.1	3.84	0.964	72.1	0.315	0.925	121.0	422.6	0.634	1.217	2.92	1.291	103.7	215.2	11.3	0.327
44448.1	44582.0	0.327	175.7	2.3	0.72	1.076	74.1	0.313	0.629	134.8	378.5	0.432	0.826	3.96	1.727	94.4	244.0	19.3	0.360
6.98	8.77		+/+	40.1	0.0	19.9	0.0	0.490	1.343	286.9	13.1	13.916	0.554	2.916	165.0	18.9	105.3	92.9	1.062
44180.0	44452.9	0.316	16.4	19.2	3.86	0.963	72.9	0.303	0.919	121.7	421.1	0.640	1.197	2.35	1.288	103.0	223.9	9.5	0.310
44452.9	44582.0	0.311	182.0	2.6	0.78	1.071	75.1	0.303	0.624	136.8	372.8	0.435	0.814	3.84	1.724	93.0	250.7	18.1	0.372
6.71	9.11		+/+	42.2	0.0	27.7	0.0	0.527	1.343	293.9	9.6	13.479	0.614	2.779	168.4	18.7	111.8	93.7	1.093
44190.0	44457.8	0.303	25.2	23.0	3.81	0.961	73.7	0.292	0.912	122.5	419.6	0.646	1.178	1.74	1.286	102.4	232.5	7.4	0.295
44457.8	44582.0	0.296	188.0	3.0	0.87	1.065	76.0	0.295	0.619	139.0	367.2	0.436	0.802	3.70	1.720	91.7	256.5	16.7	0.385
6.45	9.50		+/+	44.5	0.0	35.4	0.0	0.564	1.343	300.7	5.7	13.109	0.678	2.642	171.9	18.6	117.5	94.6	1.114
44200.0	44462.7	0.289	34.3	26.4	3.70	0.960	74.5	0.281	0.906	123.6	418.3	0.651	1.160	1.09	1.283	101.8	241.0	4.9	0.282
44462.7	44582.0	0.282	193.8	3.7	1.00	1.060	76.9	0.288	0.614	141.4	361.9	0.437	0.791	3.52	1.716	90.4	261.5	15.3	0.400
6.19	9.91		+/+	47.1	0.0	43.1	0.0	0.601	1.343	307.5	1.5	12.813	0.746	2.504	175.1	18.5	122.4	95.6	1.121
44210.0	44467.5	0.274	43.7	29.2	3.54	0.957	75.3	0.271	0.899	124.8	417.1	0.656	1.143	0.44	1.281	101.2	249.3	2.0	0.269
44467.5	44582.0	0.269	199.2	4.6	1.19	1.055	77.8	0.283	0.609	143.8	356.8	0.437D	0.782	3.28	1.713	89.3	265.8	13.7	0.415
5.93	10.33		+/+	50.1	0.0	50.7	0.0	0.638	1.343	314.1	-3.0	12.601	0.816	2.363	175.3	18.7	126.8	96.6	1.113
44220.0	44472.1	0.259	53.4	31.5	3.32	0.955	76.0	0.261	0.893	126.3	415.8	0.660	1.126	-0.20	1.279	100.7	257.4	-1.0	0.258
44472.1	44582.0	0.258	204.2	6.0	1.51	1.049	78.7	0.278	0.604	146.4	352.0	0.436D	0.773	2.92	1.709	88.3	269.4	11.7	0.429
5.67	10.74		+/+	53.6	0.0	58.1	0.0	0.675	1.343	320.4	-7.8	12.487	0.890	2.219	171.7	19.3	130.7	97.6	1.085
44230.0	44476.7	0.244	63.3	33.1	3.07	0.952	76.8	0.252	0.887	128.1	414.7	0.664	1.110	-0.82	1.277	100.2	265.2	-4.2	0.248
44476.7	44582.0	0.248	208.7	8.6	2.07	1.044	79.5	0.275	0.600	149.1	347.3	0.435D	0.764	2.31	1.705	87.3	272.6	9.0	0.442
5.42	11.11	87.1	+/+	57.8	0.7	65.4	0.0	0.710	1.343	326.8	-13.3	12.439	0.962	2.092	166.5	20.3	134.2	98.3	1.028
44240.0	44481.7	0.231	73.3	33.7	2.76	0.948	77.4	0.245	0.881	130.1	414.5	0.665	1.097	-1.40	1.275	99.9	273.1	-7.3	0.243
44481.7	44582.0	0.243	213.0	15.5	3.64	1.038	80.5	0.272	0.594	152.2	342.5	0.433D	0.756	0.70	1.700	86.3	275.7	2.6	0.455
5.21	11.49	675.0	+/+	63.8	5.3	73.4	0.0	0.749	1.343	334.5	-22.1	12.352	1.001	2.049	157.5	21.0	137.9	98.2	0.894
44260.0	44491.9	0.206	92.6	32.4	2.01	0.939	78.7	0.236	0.869	134.8	415.2	0.664	1.074	-2.40	1.271	99.7	288.5	-12.6	0.240
44491.9	44582.0	0.240	219.6	-26.9	-6.11	1.026	82.8	0.268	0.584	159.2	333.1	0.427D	0.741	10.36	1.692	84.4	283.8	32.7	0.561
4.83	14.57	783.4	+/-	65.7	6.3	89.7	0.0	0.827	1.343	343.3	13.7	12.292	1.030	2.019	153.0	22.5	134.3	105.9	0.870
44270.0	44493.6	0.183	100.3	32.5	1.84	0.935	80.1	0.221	0.865	138.5	411.5	0.674	1.055	-2.76	1.269	98.6	293.6	-15.8	0.221
44493.6	44582.0	0.221	221.0	-19.9	-4.23	1.024	83.2	0.268	0.582	160.5	331.7	0.426D	0.738	8.47	1.690	84.1	283.7	27.1	0.543
4.51	14.03	432.6	+/-	68.6	3.8	92.4	0.0	0.840	1.343	348.2	4.1	11.973	1.214	1.865	157.9	26.2	137.5	104.2	0.940
44280.0	44495.9	0.163	107.1	32.0	1.66	0.930	81.3	0.210	0.860	142.6	409.0	0.680	1.041	-3.06	1.267	97.9	298.7	-18.7	0.209
44495.9	44582.0	0.209	222.2	-14.8	-3.02	1.021	83.8	0.268	0.580	162.3	329.8	0.425D	0.735	7.23	1.688	83.8	284.2	23.2	0.536
4.27	13.84	441.9	+/-	72.7	4.1	96.0	0.0	0.857	1.343	353.1	-2.4	11.781	1.357	1.773	158.8	29.0	140.0	102.9	0.932
44290.0	44498.2	0.146	112.6	31.3	1.48	0.924	82.5	0.202	0.856	147.1	407.3	0.683	1.029	-3.32	1.265	97.4	303.5	-21.2	0.201
44498.2	44582.0	0.201	223.1	-11.8	-2.33	1.019	84.4	0.268	0.578	164.2	327.9	0.423D	0.732	6.52	1.686	83.4	284.9	20.8	0.536
4.07	13.84	578.7	+/-	76.9	5.5	99.8	0.0	0.875	1.343	357.5	-6.2	11.653	1.471	1.714	157.5	31.4	141.8	102.2	0.893

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL R A LEG	DECL I 1 KAPPA	I 1 V 1 DELK	V 1 PSI 1 RAS	PSI 1 ECCEN DECLS	ECCEN SMA CDIST1	SMA THET1 CDIST2	THET1 THET2 RAP	THET2 PERIH DECLP	PERIH APHEL VP	APHEL I 2 -A	I 2 V 2 E	V 2 PSI 2 INCL	PSI 2 R A LAM1	R A DECL LAM2	DECL SPEED ETA	SPEED PERIC
44300.0	44500.5	0.130	116.4	30.6	1.31	0.919	83.7	0.195	0.852	152.3	406.0	0.686	1.019	-3.52	1.263	97.0	307.9	-23.3	0.195
44500.5	44582.0	0.195	223.6	-10.0	-1.91	1.016	85.0	0.268	0.576	166.1	326.2	0.422D	0.730	6.08	1.684	83.0	285.7	19.2	0.539
3.90	13.92	751.7	+/-	80.9	7.4	103.5	0.0	0.892	1.343	1.4	-8.4	11.562	1.564	1.671	155.7	33.2	143.2	102.0	0.846
44310.0	44502.6	0.116	117.9	30.3	1.17	0.914	85.1	0.190	0.849	158.0	405.0	0.688	1.011	-3.68	1.262	96.8	311.8	-25.0	0.190
44502.6	44582.0	0.190	223.7	-8.8	-1.65	1.014	85.6	0.268	0.574	167.8	324.7	0.420D	0.728	5.80	1.683	82.8	286.3	18.1	0.542
3.77	14.01	926.9	+/-	84.5	9.4	106.8	0.0	0.907	1.343	4.7	-9.7	11.494	1.641	1.640	154.0	34.8	144.2	101.9	0.799
							ARRIVAL DATE = 2444584.0												
44120.0	44425.2	0.417	325.8	-7.0	2.97	0.970	66.5	0.402	0.959	120.3	434.9	0.574	1.345	4.74	1.306	109.3	171.7	13.2	0.446
44425.2	44584.0	0.446	143.9	2.6	1.15	1.100	67.5	0.398	0.651	128.5	414.4	0.392	0.910	4.50	1.721	104.7	194.4	19.2	0.398
8.80	9.85	914.0	+/+	29.4	3.9	343.8	0.0	0.343	1.364	252.9	20.7	16.638	0.297	4.532	157.3	15.3	53.1	90.9	0.873
44130.0	44429.5	0.396	334.5	-2.7	3.23	0.968	67.9	0.380	0.952	120.0	431.7	0.590	1.314	4.54	1.303	107.9	180.3	13.6	0.416
44429.5	44584.0	0.416	150.3	2.8	1.12	1.096	69.1	0.375	0.647	129.1	408.2	0.404	0.890	4.37	1.718	102.6	203.7	20.0	0.373
8.34	9.14	668.6	+/+	31.6	3.1	350.6	0.0	0.367	1.364	259.9	20.0	15.925	0.342	4.068	157.9	16.7	61.8	90.7	0.917
44140.0	44434.0	0.377	343.0	1.8	3.46	0.967	69.1	0.361	0.946	120.0	428.9	0.605	1.287	4.25	1.300	106.6	189.0	13.7	0.389
44434.0	44584.0	0.389	156.7	2.9	1.11	1.092	70.6	0.356	0.643	130.0	402.1	0.414	0.872	4.23	1.716	100.7	213.0	20.4	0.356
7.94	8.67	429.7	+/+	33.6	2.1	357.6	0.0	0.393	1.364	266.7	18.6	15.311	0.391	3.685	159.2	17.7	70.5	90.9	0.961
44150.0	44438.5	0.360	351.3	6.3	3.63	0.966	70.3	0.343	0.939	120.1	426.4	0.617	1.261	3.87	1.297	105.5	197.7	13.4	0.365
44438.5	44584.0	0.365	163.1	3.1	1.11	1.087	71.9	0.338	0.639	131.2	396.2	0.423	0.855	4.09	1.713	98.9	222.1	20.4	0.347
7.58	8.41	203.8	+/+	35.6	1.1	4.8	0.0	0.423	1.364	273.3	16.7	14.779	0.444	3.365	161.0	18.5	79.0	91.4	1.006
44160.0	44443.1	0.344	359.5	10.7	3.75	0.965	71.3	0.328	0.932	120.4	424.2	0.627	1.238	3.42	1.294	104.5	206.4	12.6	0.344
44443.1	44584.0	0.344	169.4	3.4	1.13	1.082	73.1	0.323	0.635	132.7	390.4	0.430	0.840	3.95	1.710	97.3	230.8	19.9	0.343
7.25	8.31		+/+	37.7	0.0	12.1	0.0	0.455	1.364	279.8	14.2	14.313	0.501	3.096	163.4	18.9	87.1	92.2	1.051
44170.0	44447.8	0.329	7.9	15.1	3.82	0.964	72.2	0.314	0.925	120.9	422.2	0.635	1.216	2.91	1.291	103.6	215.0	11.3	0.324
44447.8	44584.0	0.325	175.6	3.8	1.18	1.078	74.2	0.310	0.631	134.4	384.7	0.435	0.826	3.79	1.707	95.8	238.8	19.0	0.345
6.95	8.35		+/+	39.8	0.0	19.6	0.0	0.489	1.364	286.7	11.1	13.773	0.563	2.940	166.3	19.1	94.6	92.8	1.091
44180.0	44452.6	0.314	16.4	19.2	3.84	0.963	73.1	0.301	0.919	121.6	420.5	0.642	1.195	2.34	1.288	102.8	223.7	9.6	0.307
44452.6	44584.0	0.307	181.7	4.2	1.24	1.073	75.3	0.299	0.626	136.4	379.1	0.439	0.813	3.62	1.703	94.4	246.0	17.8	0.350
6.67	8.49		+/+	42.0	0.0	27.1	0.0	0.524	1.364	293.6	7.5	13.304	0.628	2.790	169.4	19.1	101.5	93.5	1.125
44190.0	44457.3	0.300	25.2	23.1	3.79	0.962	73.9	0.289	0.912	122.5	418.8	0.649	1.176	1.72	1.286	102.1	232.2	7.5	0.291
44457.3	44584.0	0.291	187.6	4.8	1.35	1.068	76.3	0.289	0.622	138.6	373.7	0.442	0.802	3.42	1.700	93.1	252.3	16.5	0.357
6.40	8.70		+/+	44.5	0.0	34.6	0.0	0.560	1.364	300.3	3.5	12.910	0.699	2.642	172.5	19.1	107.6	94.4	1.148
44200.0	44462.1	0.285	34.2	26.5	3.68	0.960	74.7	0.278	0.906	123.6	417.3	0.654	1.158	1.08	1.283	101.5	240.7	4.9	0.276
44462.1	44584.0	0.277	193.2	5.6	1.50	1.063	77.2	0.281	0.617	140.9	368.5	0.444	0.791	3.18	1.697	91.9	257.8	14.9	0.366
6.13	8.96		+/+	47.3	0.0	42.1	0.0	0.597	1.364	306.8	-0.8	12.597	0.774	2.494	174.2	19.2	113.1	95.3	1.157
44210.0	44466.7	0.270	43.6	29.4	3.53	0.958	75.5	0.267	0.900	124.9	415.9	0.659	1.140	0.44	1.281	100.9	248.9	2.1	0.263
44466.7	44584.0	0.263	198.4	6.7	1.71	1.059	78.1	0.275	0.613	143.3	363.6	0.444	0.781	2.88	1.693	90.8	262.6	13.1	0.376
5.86	9.24		+/+	50.5	0.0	49.5	0.0	0.633	1.364	313.3	-5.5	12.376	0.854	2.344	172.7	19.5	117.9	96.2	1.147
44220.0	44471.3	0.255	53.3	31.7	3.33	0.955	76.3	0.257	0.893	126.4	414.6	0.664	1.123	-0.20	1.279	100.3	256.9	-1.0	0.252
44471.3	44584.0	0.252	203.3	8.4	2.03	1.054	79.0	0.269	0.608	145.9	358.9	0.445D	0.772	2.49	1.690	89.8	266.8	10.9	0.386
5.61	9.52		+/+	54.3	0.0	56.8	0.0	0.668	1.364	319.5	-10.3	12.265	0.935	2.192	168.9	20.2	122.2	97.2	1.115
44230.0	44475.8	0.240	63.1	33.3	3.09	0.952	77.0	0.248	0.887	128.2	413.4	0.667	1.107	-0.82	1.277	99.8	264.7	-4.3	0.242
44475.8	44584.0	0.242	207.6	10.9	2.53	1.049	79.9	0.265	0.604	148.6	354.5	0.444D	0.764	1.91	1.686	88.8	270.4	8.2	0.396
5.36	9.80		+/+	58.7	0.0	63.9	0.0	0.703	1.364	325.3	-15.6	12.304	1.015	2.039	164.0	21.2	126.0	98.2	1.055
44240.0	44480.4	0.226	72.9	34.2	2.81	0.948	77.8	0.240	0.881	130.3	412.6	0.670	1.093	-1.39	1.275	99.4	272.3	-7.5	0.234
44480.4	44584.0	0.234	211.6	15.4	3.47	1.045	80.8	0.261	0.600	151.5	350.1	0.443D	0.756	0.90	1.682	88.0	273.6	3.7	0.406
5.13	10.09	417.8	+/+	64.3	3.4	71.2	0.0	0.739	1.364	332.4	-22.0	12.198	1.078	1.974	157.6	22.3	129.6	98.1	0.948
44280.0	44498.2	0.170	108.0	30.4	1.47	0.929	80.8	0.216	0.859	141.8	411.9	0.673	1.045	-3.06	1.267	98.5	300.3	-17.7	0.220
44498.2	44584.0	0.220	221.1	-31.2	-6.38	1.027	85.0	0.253	0.584	164.8	334.8	0.436D	0.731	10.47	1.669	85.0	286.3	34.8	0.530
4.34	13.65	774.1	+/-	72.0	6.8	99.7	0.0	0.875	1.364	349.9	12.2	11.955	1.226	1.856	147.4	26.9	130.6	109.3	0.861
44290.0	44499.5	0.149	113.2	30.2	1.36	0.924	82.3	0.205	0.856	146.6	408.9	0.680	1.031	-3.30	1.265	97.7	304.4	-20.5	0.206
44499.5	44584.0	0.206	221.6	-27.0	-5.25	1.026	85.4	0.253	0.582	166.0	333.8	0.435D	0.730	9.32	1.668	84.8	286.3	31.3	0.517
4.10	13.30	548.3	+/-	74.7	5.1	101.9	0.0	0.885	1.364	353.6	6.2	11.734	1.397	1.752	149.1	30.1	132.6	108.2	0.904
44300.0	44501.0	0.131	116.7	30.2	1.27	0.919	83.7	0.196	0.852	152.1	406.5	0.685	1.019	-3.51	1.263	97.1	308.3	-23.0	0.196
44501.0	44584.0	0.196	221.9	-23.7	-4.42	1.025	85.8	0.252	0.581	167.3	332.7	0.435D	0.728	8.47	1.667	84.6	286.5	28.6	0.510
3.91	13.09	500.8	+/-	77.9	4.9	104.2	0.0	0.896	1.364	357.0	1.7	11.584	1.540	1.682	149.4	32.8	134.2	107.2	0.910
44310.0	44502.4	0.116	117.8	30.6	1.19	0.914	85.1	0.190	0.849	158.1	404.8	0.688	1.010	-3.68	1.262	96.7	311.6	-25.2	0.189
44502.4	44584.0	0.189	221.9	-21.2	-3.84	1.023	86.2	0.252	0.580	168.5	331.8	0.434D	0.727	7.87	1.666	84.4	286.8	26.6	0.506
3.77	12.97	543.0	+/-	80.9	5.5	106.5	0.0	0.906	1.364	360.0	-1.4	11.483	1.653	1.635	148.7	35.0	135.5	106.5	0.894
44320.0	44503.5	0.104	115.6	31.8	1.17	0.910	86.6	0.185	0.848	164.9	403.4	0.691	1.004	-3.86	1.261	96.4	314.3	-27.1	0.185
44503.5	44584.0	0.185	221.8	-19.7	-3.49	1.023	86.5	0.252	0.580	169.5	331.1	0.433D	0.726	7.50	1.665	84.3	287.0	25.4	0.504
3.67	12.92	603.4	+/-	83.3	6.3	108.2	0.0	0.914	1.364	2.3	-3.5	11.420	1.732	1.606	147.5	36.9	136.3	105.9	0.874
44330.0	44504.1	0.098	109.4	33.8	1.23	0.906	88.3	0.182	0.847	172.5	402.2	0.693	1.001	-4.06	1.261	96.1	316.2	-29.1	0.183
44504.1	44584.0	0.183	221.7	-18.8	-3.31	1.022	86.7	0.252	0.579	170.2	330.6	0.433D	0.725	7.31	1.665	84.2	287.2	24.7	0.504
3.62	12.91	651.2	+/-	84.7	6.9	109.3	0.0	0.919	1.364	4.0	-5.0	11.389	1.774	1.592	145.9	38.8	136.7	105.2	0.860
44340.0	44503.8	0.099	99.5	37.2	1.52	0.904	90.3	0.181	0.849	181.4	400.7	0.695	1.002A	-4.43	1.262	95.9	316.7	-31.9	0.184
44503.8	44584.0	0.184	221.8	-19.2	-3.39	1.022	86.6	0.252	0.579	169.9	330.8	0.433D	0.726	7.40	1.665	84.2	287.1	25.0	0.504
3.63	12.91	623.4	+/-	84.0	6.5	108.8	0.0	0.917	1.364	4.7	-6.6	11.402	1.755	1.598	143.5	41.4	136.5	104.0	0.868
44350.0	44500.9	0.118	86.3	46.2	2.91	0.906	92.8	0.182	0.855	192.6	397.5	0.699	1.010A	-5.80	1.265	95.5	314.1	-40.4	0.197
44500.9	44584.0	0.196	221.9	-23.8	-4.45	1.025	85.8	0.252	0.581	167.2	332.8	0.435D	0.728	8.50	1.667	84.6	286.5	28.7	0.510
3.79	13.09	365.6	+/-	76.4	3.6	104.1	0.0	0.895	1.364	4.3	-10.2	11.590	1.534	1.684	135.8	48.7	134.1	99.7	0.946

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
									ARRIVAL DATE = 2444586.0										
44120.0	44425.8	0.423	325.6	-6.9	3.08	0.970	66.1	0.408	0.959	120.6	436.1	0.568	1.350	4.82	1.306	109.8	171.9	13.1	0.456
44425.8	44586.0	0.456	144.7	3.7	1.65	1.100	67.0	0.406	0.651	128.7	419.7	0.386	0.915	4.64	1.702	106.2	192.3	17.7	0.435
8.95	10.91	922.0	+/+	28.5	3.9	344.7	0.0	0.346	1.383	253.2	19.0	16.875	0.284	4.691	158.8	14.9	45.3	91.4	0.871
44130.0	44430.0	0.400	334.4	-2.7	3.31	0.968	67.6	0.384	0.952	120.2	432.7	0.586	1.318	4.60	1.302	108.2	180.5	13.5	0.423
44430.0	44586.0	0.423	151.0	3.8	1.59	1.096	68.7	0.381	0.647	129.1	413.5	0.401	0.893	4.44	1.700	104.0	200.4	18.5	0.402
8.44	9.97	654.6	+/+	30.7	3.0	351.4	0.0	0.369	1.383	260.1	18.2	16.093	0.331	4.176	159.3	16.3	52.9	91.2	0.919
44140.0	44434.3	0.380	342.9	1.8	3.51	0.967	69.0	0.364	0.946	120.1	429.6	0.602	1.289	4.28	1.300	106.8	189.1	13.6	0.394
44434.3	44586.0	0.394	157.3	4.0	1.55	1.092	70.3	0.359	0.643	130.0	407.5	0.412	0.874	4.25	1.697	102.0	208.8	19.1	0.377
8.00	9.26	396.5	+/+	32.8	1.9	358.2	0.0	0.396	1.383	266.8	16.8	15.424	0.381	3.754	160.5	17.4	60.8	91.3	0.968
44150.0	44438.7	0.362	351.2	6.3	3.66	0.966	70.2	0.345	0.939	120.2	426.9	0.615	1.263	3.89	1.297	105.6	197.8	13.3	0.368
44438.7	44586.0	0.368	163.5	4.3	1.54	1.087	71.7	0.340	0.639	131.1	401.6	0.422	0.857	4.07	1.695	100.2	217.2	19.2	0.359
7.62	8.77	153.7	+/+	35.0	0.8	5.2	0.0	0.425	1.383	273.3	14.9	14.847	0.437	3.405	162.3	18.2	68.6	91.8	1.017
44160.0	44443.3	0.345	359.5	10.7	3.77	0.965	71.2	0.329	0.932	120.5	424.4	0.626	1.238	3.43	1.294	104.6	206.4	12.5	0.345
44443.3	44586.0	0.345	169.7	4.6	1.55	1.083	73.0	0.323	0.636	132.5	395.9	0.430	0.841	3.87	1.692	98.6	225.4	18.9	0.348
7.27	8.44		+/+	37.1	0.0	12.3	0.0	0.456	1.383	279.9	12.4	14.299	0.497	3.143	164.6	18.8	76.4	92.4	1.065
44170.0	44447.8	0.329	7.9	15.1	3.82	0.964	72.2	0.314	0.925	120.9	422.2	0.635	1.216	2.91	1.291	103.6	215.0	11.3	0.324
44447.8	44586.0	0.325	175.8	5.1	1.58	1.079	74.2	0.309	0.631	134.2	390.3	0.436	0.827	3.67	1.689	97.0	233.3	18.3	0.342
6.95	8.27		+/+	39.3	0.0	19.6	0.0	0.489	1.383	286.7	9.2	13.721	0.562	2.972	167.3	19.1	83.8	92.9	1.108
44180.0	44452.5	0.314	16.4	19.2	3.83	0.963	73.1	0.300	0.919	121.6	420.3	0.643	1.195	2.33	1.288	102.8	223.6	9.6	0.306
44452.5	44586.0	0.306	181.7	5.6	1.65	1.074	75.3	0.297	0.627	136.1	384.9	0.441	0.813	3.46	1.686	95.6	240.6	17.3	0.340
6.66	8.21		+/+	41.7	0.0	26.9	0.0	0.523	1.383	293.4	5.6	13.221	0.633	2.809	170.1	19.2	90.7	93.5	1.145
44190.0	44457.1	0.299	25.2	23.1	3.78	0.962	74.0	0.288	0.912	122.5	418.5	0.650	1.175	1.72	1.286	102.0	232.1	7.5	0.289
44457.1	44586.0	0.289	187.5	6.3	1.75	1.070	76.4	0.286	0.623	138.2	379.7	0.445	0.802	3.22	1.683	94.3	247.3	16.0	0.341
6.37	8.24		+/+	44.3	0.0	34.3	0.0	0.559	1.383	300.0	1.6	12.804	0.709	2.650	172.4	19.3	97.1	94.3	1.170
44200.0	44461.7	0.284	34.2	26.5	3.67	0.960	74.8	0.276	0.906	123.6	416.8	0.656	1.156	1.08	1.283	101.4	240.5	5.0	0.274
44461.7	44586.0	0.274	192.9	7.2	1.89	1.066	77.4	0.277	0.619	140.5	374.7	0.448	0.791	2.94	1.679	93.2	253.2	14.5	0.344
6.10	8.34		+/+	47.3	0.0	41.6	0.0	0.594	1.383	306.4	-2.8	12.474	0.791	2.491	172.8	19.5	102.9	95.2	1.179
44210.0	44466.3	0.268	43.6	29.4	3.52	0.958	75.6	0.265	0.900	124.9	415.2	0.661	1.138	0.43	1.281	100.7	248.7	2.1	0.260
44466.3	44586.0	0.260	198.0	8.4	2.10	1.062	78.3	0.269	0.615	142.9	369.9	0.450	0.781	2.62	1.676	92.1	258.4	12.6	0.349
5.83	8.48		+/+	50.8	0.0	48.8	0.0	0.629	1.383	312.7	-7.4	12.243	0.877	2.332	170.6	20.0	108.1	96.0	1.168
44220.0	44470.7	0.253	53.2	31.8	3.33	0.955	76.4	0.255	0.894	126.4	413.8	0.666	1.121	-0.20	1.279	100.1	256.6	-1.0	0.248
44470.7	44586.0	0.248	202.7	10.1	2.40	1.057	79.2	0.263	0.611	145.5	365.3	0.451	0.772	2.21	1.673	91.1	263.0	10.5	0.355
5.57	8.64		+/+	54.8	0.0	55.9	0.0	0.664	1.383	318.8	-12.1	12.125	0.966	2.174	166.8	20.7	112.7	96.9	1.134
44230.0	44475.1	0.238	62.9	33.5	3.10	0.952	77.2	0.245	0.888	128.3	412.4	0.670	1.105	-0.81	1.277	99.6	264.3	-4.3	0.237
44475.1	44586.0	0.237	207.0	12.5	2.83	1.053	80.1	0.257	0.607	148.1	361.1	0.451	0.763	1.68	1.670	90.2	267.0	7.8	0.361
5.31	8.82		+/+	59.4	0.0	62.8	0.0	0.698	1.383	324.5	-17.1	12.153	1.054	2.019	162.2	21.9	116.8	97.9	1.074
44240.0	44479.5	0.223	72.7	34.5	2.85	0.949	78.0	0.237	0.882	130.5	411.4	0.673	1.090	-1.39	1.275	99.2	271.8	-7.6	0.229
44479.5	44586.0	0.229	210.8	16.1	3.51	1.049	81.1	0.253	0.603	151.0	356.9	0.451D	0.756	0.89	1.667	89.4	270.5	4.0	0.368
5.08	9.02	284.7	+/+	64.9	2.4	69.8	0.0	0.732	1.383	331.1	-22.6	12.104	1.132	1.928	156.9	23.2	120.6	98.1	0.978
44300.0	44503.9	0.137	118.4	27.5	0.98	0.918	83.1	0.203	0.851	150.8	409.9	0.678	1.023	-3.44	1.263	97.8	310.5	-21.3	0.207
44503.9	44586.0	0.207	219.7	-35.6	-6.72	1.030	87.1	0.240	0.584	170.7	337.5	0.444D	0.725	10.60	1.651	85.7	287.5	37.3	0.499
3.98	12.77	972.1	+/-	78.4	9.1	108.9	0.0	0.917	1.383	354.9	12.8	11.747	1.386	1.758	140.6	30.0	126.0	113.4	0.807
44310.0	44504.9	0.120	119.7	27.7	0.92	0.913	84.7	0.194	0.848	156.8	407.6	0.683	1.013	-3.58	1.262	97.2	313.6	-23.4	0.197
44504.9	44586.0	0.197	219.6	-33.0	-5.99	1.029	87.4	0.240	0.584	171.8	336.9	0.444D	0.724	9.85	1.650	85.6	287.5	35.0	0.490
3.81	12.51	821.2	+/-	80.7	8.0	110.5	0.0	0.925	1.383	357.4	9.0	11.598	1.526	1.688	141.1	32.4	127.2	112.9	0.831
44320.0	44505.8	0.107	117.8	28.7	0.89	0.909	86.3	0.189	0.846	163.6	405.8	0.687	1.006	-3.72	1.261	96.8	316.2	-25.2	0.190
44505.8	44586.0	0.190	219.3	-31.1	-5.49	1.029	87.7	0.240	0.583	172.6	336.4	0.444D	0.723	9.32	1.650	85.5	287.5	33.4	0.484
3.69	12.34	761.0	+/-	82.7	7.7	111.9	0.0	0.931	1.383	359.4	6.3	11.501	1.632	1.643	140.8	34.4	128.1	112.4	0.839
44330.0	44506.4	0.099	112.3	30.3	0.91	0.905	88.0	0.185	0.846	171.2	404.5	0.689	1.002	-3.86	1.261	96.5	318.1	-26.8	0.187
44506.4	44586.0	0.187	219.1	-29.9	-5.19	1.028	87.9	0.240	0.583	173.3	336.0	0.443D	0.723	9.01	1.649	85.4	287.6	32.4	0.481
3.63	12.25	741.9	+/-	84.0	7.6	112.9	0.0	0.935	1.383	0.9	4.4	11.445	1.699	1.618	140.2	36.2	128.7	112.0	0.840
44340.0	44506.5	0.098	103.3	32.5	1.04	0.902	89.9	0.184	0.846	179.7	403.3	0.691	1.002	-4.07	1.261	96.3	319.1	-28.6	0.186
44506.5	44586.0	0.186	219.1	-29.6	-5.13	1.028	87.9	0.240	0.583	173.4	336.0	0.443D	0.723	8.95	1.649	85.4	287.6	32.2	0.481
3.62	12.24	715.6	+/-	84.0	7.4	113.1	0.0	0.936	1.383	1.6	3.1	11.435	1.713	1.613	139.1	37.9	128.8	111.4	0.846
44350.0	44505.9	0.108	93.4	35.3	1.41	0.902	92.1	0.186	0.850	189.2	402.2	0.692	1.008A	-4.49	1.263	96.3	318.9	-31.2	0.190
44505.9	44586.0	0.189	219.3	-30.8	-5.41	1.029	87.7	0.240	0.583	172.8	336.3	0.444D	0.723	9.24	1.650	85.5	287.5	33.1	0.484
3.70	12.32	646.3	+/-	81.8	6.6	112.2	0.0	0.932	1.383	1.6	1.9	11.488	1.647	1.637	137.1	40.2	128.3	110.6	0.868
44360.0	44483.3	0.239	80.2	-25.5	1.26	0.923	97.0	0.187	0.882	213.7	380.4	0.717	1.046A	8.75	1.275	93.2	303.2	59.2	0.225
44483.3	44586.0	0.226	213.5	21.2	4.51	1.046	81.9	0.249	0.600	153.6	353.5	0.450D	0.750	-0.19	1.664	88.7	273.3	-0.9	0.375
5.33	9.22	973.4	-/+	71.7	8.3	75.9	0.0	0.761	1.383	7.2	21.7	12.051	1.164	1.902	120.1	69.7	123.5	70.3	0.822
44360.0	44503.8	0.135	84.5	43.0	2.88	0.906	94.7	0.191	0.858	200.6	400.3	0.694	1.023A	-5.96	1.267	96.2	316.2	-38.9	0.208
44503.8	44586.0	0.208	219.7	-36.0	-6.83	1.030	87.1	0.240	0.585	170.6	337.6	0.444D	0.725	10.71	1.651	85.7	287.5	37.7	0.501
3.95	12.81	412.9	+/-	72.7	3.8	108.7	0.0	0.916	1.383	0.2	-0.5	11.770	1.366	1.769	130.9	46.4	125.8	108.5	0.939
									ARRIVAL DATE = 2444588.0										
44120.0	44426.5	0.432	325.4	-6.9	3.22	0.970	65.6	0.416	0.959	120.9	437.6	0.560	1.358	4.92	1.305	110.5	172.3	12.9	0.469
44426.5	44588.0	0.469	145.7	4.6	2.15	1.099	66.3	0.416	0.650	129.0	424.6	0.380	0.920	4.81	1.687	107.7	191.2	16.3	0.478
9.15	12.17	971.0	+/+	27.5	4.0	345.9	0.0	0.350	1.398	253.7	17.2	17.188	0.269	4.904	160.2	14.4	38.7	92.1	0.862
44130.0	44430.7	0.407	334.2	-2.6	3.43	0.968	67.2	0.391	0.952	120.5	433.9	0.580	1.324	4.67	1.302	108.7	180.8	13.4	0.433
44430.7	44588.0	0.433	151.9	4.8	2.05	1.095	68.3	0.389	0.647	129.3	418.5	0.395	0.898	4.55	1.684	105.4	198.4	17.1	0.438
8.59	11.02	682.1	+/+	29.7	3.0	352.4	0.0	0.373	1.398	260.6	16.5	16.329	0.315	4.329	160.7	15.8	45.4	91.7	0.914

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44140.0	44434.9	0.385	342.8	1.8	3.59	0.967	68.7	0.368	0.945	120.3	430.6	0.597	1.294	4.34	1.299	107.2	189.4	13.5	0.402
44434.9	44588.0	0.402	158.1	5.1	1.99	1.091	70.0	0.365	0.643	130.0	412.5	0.409	0.877	4.30	1.682	103.3	205.8	17.6	0.407
8.11	10.10	405.0	+/+	31.9	1.9	359.1	0.0	0.399	1.398	267.2	15.1	15.599	0.367	3.863	161.8	16.9	52.3	91.8	0.966
44150.0	44439.2	0.365	351.2	6.3	3.72	0.966	69.9	0.349	0.939	120.3	427.7	0.612	1.266	3.93	1.297	105.9	198.0	13.2	0.374
44439.2	44588.0	0.374	164.2	5.4	1.95	1.087	71.5	0.344	0.639	131.0	406.7	0.420	0.859	4.07	1.679	101.5	213.4	17.8	0.382
7.69	9.40	146.9	+/+	34.2	0.8	5.9	0.0	0.427	1.398	273.6	13.2	14.972	0.423	3.480	163.4	17.8	59.4	92.2	1.018
44160.0	44443.6	0.347	359.5	10.7	3.81	0.965	71.1	0.331	0.932	120.5	425.0	0.624	1.241	3.45	1.294	104.7	206.6	12.5	0.349
44443.6	44588.0	0.349	170.3	5.8	1.94	1.083	72.9	0.326	0.636	132.4	401.1	0.429	0.843	3.83	1.676	99.8	220.9	17.7	0.363
7.32	8.87		+/+	36.4	0.0	12.9	0.0	0.458	1.398	280.1	10.7	14.370	0.486	3.201	165.6	18.5	66.4	92.7	1.069
44170.0	44448.1	0.330	7.9	15.1	3.85	0.964	72.1	0.315	0.925	121.0	422.6	0.634	1.217	2.92	1.291	103.7	215.2	11.3	0.327
44448.1	44588.0	0.327	176.3	6.2	1.96	1.079	74.1	0.310	0.632	134.0	395.6	0.436	0.828	3.59	1.674	98.2	228.3	17.2	0.350
6.98	8.49		+/+	38.7	0.0	19.9	0.0	0.491	1.398	286.8	7.5	13.752	0.554	3.014	168.0	18.9	73.4	93.1	1.115
44180.0	44452.6	0.314	16.4	19.2	3.84	0.963	73.1	0.301	0.919	121.6	420.5	0.642	1.195	2.34	1.288	102.9	223.7	9.6	0.307
44452.6	44588.0	0.307	182.1	6.8	2.01	1.075	75.3	0.296	0.628	135.9	390.3	0.442	0.814	3.33	1.671	96.8	235.4	16.4	0.341
6.67	8.24		+/+	41.3	0.0	27.1	0.0	0.524	1.398	293.4	3.9	13.221	0.628	2.838	170.4	19.1	80.1	93.7	1.153
44190.0	44457.2	0.299	25.2	23.1	3.78	0.962	74.0	0.288	0.912	122.5	418.5	0.650	1.175	1.72	1.286	102.1	232.1	7.5	0.289
44457.2	44588.0	0.289	187.7	7.6	2.10	1.071	76.4	0.285	0.624	137.9	385.2	0.447	0.802	3.06	1.668	95.5	242.0	15.3	0.336
6.38	8.10		+/+	44.1	0.0	34.3	0.0	0.559	1.398	299.9	-0.1	12.779	0.708	2.666	171.9	19.3	86.4	94.4	1.179
44200.0	44461.7	0.283	34.2	26.5	3.67	0.960	74.8	0.276	0.906	123.6	416.7	0.656	1.156	1.08	1.283	101.3	240.4	5.0	0.273
44461.7	44588.0	0.273	193.0	8.6	2.24	1.067	77.4	0.275	0.620	140.2	380.3	0.450	0.791	2.76	1.665	94.3	248.0	13.9	0.334
6.09	8.04		+/+	47.2	0.0	41.5	0.0	0.593	1.398	306.2	-4.4	12.431	0.794	2.496	171.4	19.6	92.3	95.2	1.189
44210.0	44466.1	0.268	43.5	29.5	3.52	0.958	75.7	0.264	0.900	124.9	415.0	0.662	1.138	0.43	1.281	100.6	248.6	2.1	0.258
44466.1	44588.0	0.259	198.0	9.8	2.43	1.064	78.4	0.266	0.617	142.6	375.6	0.453	0.781	2.41	1.662	93.3	253.5	12.1	0.334
5.81	8.04		+/+	50.8	0.0	48.5	0.0	0.628	1.398	312.4	-9.0	12.186	0.886	2.329	168.8	20.1	97.6	96.0	1.178
44220.0	44470.5	0.252	53.1	31.9	3.33	0.955	76.5	0.254	0.894	126.5	413.4	0.667	1.120	-0.20	1.279	100.0	256.5	-1.0	0.246
44470.5	44588.0	0.246	202.6	11.5	2.69	1.060	79.4	0.259	0.613	145.1	371.3	0.454	0.772	2.01	1.659	92.3	258.3	10.0	0.335
5.55	8.08		+/+	55.0	0.0	55.5	0.0	0.662	1.398	318.4	-13.6	12.058	0.981	2.166	165.2	21.0	102.4	96.9	1.144
44230.0	44474.7	0.236	62.8	33.6	3.11	0.952	77.3	0.244	0.888	129.3	411.9	0.671	1.104	-0.81	1.277	99.5	264.1	-4.4	0.234
44474.7	44588.0	0.235	206.7	13.7	3.06	1.056	80.3	0.253	0.609	147.8	367.1	0.456	0.763	1.51	1.656	91.4	262.6	7.4	0.338
5.29	8.16		+/+	59.8	0.0	62.3	0.0	0.695	1.398	324.0	-18.3	12.069	1.077	2.007	160.9	22.3	106.8	97.8	1.085
44240.0	44479.0	0.221	72.6	34.7	2.87	0.949	78.1	0.235	0.882	130.5	410.6	0.675	1.089	-1.38	1.275	99.0	271.5	-7.7	0.225
44479.0	44588.0	0.225	210.3	16.8	3.60	1.053	81.2	0.247	0.606	150.6	363.2	0.456	0.756	0.84	1.653	90.6	266.4	4.1	0.341
5.05	8.26	209.8	+/+	65.3	1.8	69.0	0.0	0.728	1.398	330.2	-23.2	12.048	1.165	1.901	156.2	23.8	110.7	98.1	0.996
44250.0	44483.4	0.206	82.1	35.0	2.59	0.945	78.8	0.228	0.876	133.0	410.0	0.677	1.076	-1.90	1.272	98.6	278.8	-11.0	0.220
44483.4	44588.0	0.220	213.6	21.8	4.49	1.049	82.2	0.243	0.602	153.7	359.3	0.456D	0.749	-0.18	1.650	89.9	270.1	-0.9	0.347
4.84	8.40	757.7	+/+	71.8	6.6	76.0	0.0	0.762	1.398	337.4	-28.9	11.955	1.226	1.856	150.6	25.1	114.3	97.5	0.864
44360.0	44483.0	0.235	79.8	-24.8	-10.94	0.923	97.0	0.187	0.882	213.9	380.1	0.718	1.047A	8.44	1.275	93.1	303.5	58.3	0.220
44483.0	44588.0	0.220	213.3	21.2	4.39	1.049	82.1	0.243	0.603	153.4	359.7	0.456D	0.749	-0.06	1.651	89.9	259.7	-0.3	0.346
5.27	8.39	803.6	-/+	72.2	7.0	75.4	0.0	0.759	1.398	6.1	21.6	11.957	1.225	1.857	121.0	69.5	114.0	70.8	0.854
44370.0	44491.6	0.264	83.8	-23.1	-12.07	0.924	98.8	0.204	0.888	219.7	390.1	0.707	1.070A	9.16	1.280	95.0	304.3	54.4	0.250
44491.6	44588.0	0.250	216.4	40.6	9.02	1.043	84.1	0.236	0.596	160.2	352.6	0.456D	0.737	-4.94	1.645	88.6	276.2	-21.9	0.380
5.75	9.35	37.1	-/+	57.0	0.3	89.2	0.0	0.825	1.398	358.2	9.7	12.467	0.949	2.106	121.8	61.5	118.1	91.0	1.041

ARRIVAL DATE = 2444590.0

44130.0	44431.5	0.416	334.0	-2.6	3.57	0.968	66.7	0.399	0.952	120.8	435.6	0.572	1.332	4.77	1.302	109.4	181.2	13.2	0.446
44431.5	44590.0	0.446	153.0	5.7	2.53	1.095	67.6	0.398	0.646	129.6	423.2	0.389	0.903	4.67	1.672	106.8	197.5	15.7	0.482
8.78	12.26	748.8	+/+	28.7	3.2	353.7	0.0	0.378	1.412	261.3	14.8	16.638	0.297	4.532	161.9	15.2	38.9	92.3	0.901
44140.0	44435.6	0.392	342.6	1.8	3.71	0.967	68.3	0.375	0.945	120.5	432.0	0.591	1.300	4.41	1.299	107.7	189.7	13.4	0.412
44435.6	44590.0	0.412	159.2	6.0	2.42	1.091	69.5	0.372	0.642	130.2	417.2	0.403	0.882	4.37	1.669	104.6	204.1	16.1	0.443
8.26	11.16	453.6	+/+	31.0	2.1	0.2	0.0	0.404	1.412	267.8	13.5	15.837	0.349	4.012	162.9	16.4	45.0	92.3	0.957
44150.0	44439.8	0.371	351.0	6.3	3.81	0.966	69.6	0.354	0.939	120.5	428.8	0.607	1.270	3.98	1.297	106.3	198.3	13.1	0.382
44439.8	44590.0	0.382	165.2	6.3	2.35	1.087	71.1	0.350	0.639	131.1	411.5	0.416	0.863	4.09	1.667	102.7	210.7	16.3	0.412
7.81	10.26	179.6	+/+	33.3	0.9	6.9	0.0	0.432	1.412	274.1	11.6	15.154	0.406	3.589	164.5	17.3	51.3	92.7	1.012
44160.0	44444.1	0.351	359.4	10.7	3.87	0.965	70.8	0.335	0.932	120.6	426.0	0.620	1.244	3.49	1.294	105.1	206.8	12.4	0.355
44444.1	44590.0	0.356	171.2	6.8	2.32	1.083	72.6	0.330	0.636	132.3	405.9	0.426	0.845	3.81	1.664	100.9	217.5	16.3	0.387
7.41	9.55		+/+	35.6	0.0	13.7	0.0	0.462	1.412	280.5	9.1	14.521	0.468	3.272	166.4	18.0	57.6	93.2	1.064
44170.0	44448.5	0.334	7.8	15.1	3.89	0.964	71.9	0.318	0.925	121.0	423.4	0.631	1.220	2.94	1.291	104.0	215.4	11.2	0.332
44448.5	44590.0	0.332	177.0	7.3	2.32	1.079	73.9	0.313	0.632	133.9	400.5	0.434	0.830	3.53	1.662	99.3	224.2	15.9	0.367
7.05	8.99		+/+	38.0	0.0	20.6	0.0	0.494	1.412	287.1	5.9	13.862	0.538	3.068	168.6	18.4	63.9	93.5	1.112
44180.0	44452.9	0.317	16.4	19.2	3.86	0.963	72.9	0.303	0.919	121.7	421.1	0.640	1.197	2.35	1.288	103.0	223.9	9.5	0.311
44452.9	44590.0	0.311	182.7	7.9	2.35	1.076	75.2	0.298	0.628	135.7	395.3	0.441	0.816	3.24	1.659	97.9	230.8	15.3	0.353
6.71	8.57		+/+	40.7	0.0	27.7	0.0	0.527	1.412	293.6	2.3	13.297	0.614	2.876	170.4	18.7	70.1	94.0	1.152
44190.0	44457.4	0.300	25.2	23.1	3.79	0.962	73.9	0.289	0.912	122.5	418.9	0.648	1.176	1.73	1.286	102.2	232.3	7.5	0.291
44457.4	44590.0	0.292	188.2	8.7	2.43	1.072	76.3	0.285	0.625	137.7	390.3	0.447	0.803	2.94	1.656	96.6	237.0	14.3	0.342
6.40	8.26		+/+	43.6	0.0	34.7	0.0	0.561	1.412	300.0	-1.7	12.828	0.697	2.691	171.1	19.0	76.1	94.7	1.179
44200.0	44461.8	0.284	34.2	26.5	3.68	0.960	74.8	0.277	0.906	123.6	416.9	0.655	1.156	1.08	1.283	101.4	240.5	5.0	0.274
44461.8	44590.0	0.275	193.4	9.7	2.54	1.068	77.4	0.274	0.621	139.9	385.5	0.451	0.791	2.61	1.653	95.4	242.9	13.0	0.334
6.10	8.05		+/+	46.9	0.0	41.7	0.0	0.595	1.412	306.3	-5.9	12.459	0.786	2.511	170.0	19.4	81.7	95.4	1.188
44210.0	44466.2	0.268	43.6	29.5	3.52	0.958	75.6	0.265	0.900	124.9	415.1	0.661	1.138	0.43	1.281	100.7	248.6	2.1	0.259
44466.2	44590.0	0.259	198.3	11.0	2.71	1.065	78.4	0.265	0.618	142.3	380.9	0.454	0.781	2.25	1.650	94.3	248.3	11.3	0.329
5.82	7.91		+/+	50.7	0.0	48.7	0.0	0.629	1.412	312.4	-10.3	12.197	0.882	2.336	167.3	20.1	87.0	96.2	1.178
44220.0	44470.5	0.252	53.1	31.9	3.33	0.955	76.5	0.254	0.894	126.5	413.3	0.667	1.120	-0.20	1.279	100.0	256.5	-1.0	0.246
44470.5	44590.0	0.246	202.8	12.6	2.94	1.061	79.4	0.257	0.614	144.8	376.7	0.457	0.772	1.84	1.648	93.4	253.3	9.3	0.326
5.55	7.83		+/+	55.0	0.0	55.5	0.0	0.662	1.412	318.2	-14.8	12.054	0.982	2.166	163.8	21.0	91.8	97.0	1.145

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44230.0	44474.7	0.236	62.8	33.7	3.11	0.952	77.3	0.243	0.888	128.4	411.7	0.672	1.104	-0.81	1.277	99.4	264.1	-4.4	0.234
44474.7	44590.0	0.234	206.8	14.7	3.26	1.058	80.3	0.250	0.611	147.5	372.7	0.458	0.764	1.36	1.645	92.5	257.7	6.9	0.325
5.28	7.80		+/+	59.9	0.0	62.1	0.0	0.594	1.412	323.8	-19.3	12.048	1.083	2.004	159.7	22.4	96.2	97.8	1.087
44240.0	44478.7	0.220	72.5	34.8	2.88	0.949	78.2	0.234	0.882	130.6	410.3	0.675	1.088	-1.38	1.274	98.9	271.4	-7.8	0.224
44478.7	44590.0	0.224	210.3	17.5	3.71	1.055	81.3	0.244	0.608	150.2	368.9	0.459	0.756	0.77	1.642	91.7	261.6	3.9	0.325
5.04	7.80	175.0	+/+	65.4	1.5	68.6	0.0	0.726	1.412	329.8	-23.9	12.026	1.179	1.890	155.5	24.0	100.2	98.1	1.004
44250.0	44482.9	0.205	82.0	35.2	2.62	0.945	79.0	0.226	0.876	133.1	409.3	0.678	1.074	-1.90	1.272	98.5	278.5	-11.1	0.217
44482.9	44590.0	0.217	213.4	21.4	4.36	1.052	82.2	0.239	0.605	153.2	365.3	0.460	0.749	-0.03	1.640	91.0	265.3	-0.2	0.327
4.81	7.85	632.9	+/+	71.7	5.6	75.2	0.0	0.758	1.412	336.7	-28.7	11.909	1.259	1.834	150.8	25.6	103.9	97.4	0.891
44360.0	44482.8	0.233	79.6	-24.4	-10.77	0.923	97.0	0.187	0.882	214.0	379.9	0.718	1.047A	8.28	1.276	93.1	303.6	57.8	0.217
44482.8	44590.0	0.217	213.3	21.3	4.34	1.052	82.2	0.239	0.605	153.1	365.4	0.460	0.749	0.0	1.640	91.0	265.2	-0.1	0.327
5.24	7.85	697.1	-/+	72.3	6.2	75.1	0.0	0.758	1.412	5.5	21.6	11.909	1.258	1.834	121.4	69.3	103.8	71.1	0.876
44370.0	44490.2	0.244	81.7	-18.8	-10.29	0.926	99.0	0.205	0.891	220.7	388.8	0.708	1.073A	7.42	1.281	94.8	305.2	48.4	0.220
44490.2	44590.0	0.220	216.8	33.1	6.64	1.047	83.9	0.232	0.599	159.0	359.4	0.4600	0.738	-2.57	1.635	89.9	271.0	-12.5	0.339
5.42	8.18		-/+	64.9	0.0	87.0	0.0	0.814	1.412	357.8	10.8	11.947	1.220	1.864	127.8	58.6	109.1	89.2	1.054
							ARRIVAL DATE = 2444592.0												
44130.0	44432.4	0.427	333.7	-2.5	3.75	0.968	66.1	0.409	0.952	121.2	437.5	0.563	1.341	4.90	1.302	110.1	181.6	13.1	0.462
44432.4	44592.0	0.463	154.3	6.5	3.01	1.094	56.8	0.411	0.645	130.0	427.6	0.380	0.910	4.82	1.662	108.2	197.5	14.5	0.531
9.03	13.69	856.2	+/+	27.7	3.6	355.2	0.0	0.384	1.423	262.1	13.2	17.024	0.277	4.792	163.0	14.5	33.4	93.0	0.882
44140.0	44436.4	0.401	342.4	1.9	3.85	0.967	67.8	0.383	0.945	120.8	433.7	0.583	1.307	4.51	1.299	108.4	190.1	13.2	0.425
44436.4	44592.0	0.426	160.4	6.8	2.86	1.090	68.8	0.382	0.642	130.4	421.7	0.396	0.887	4.46	1.660	105.9	203.3	14.8	0.486
8.45	12.40	542.3	+/+	29.9	2.5	1.6	0.0	0.409	1.423	268.6	11.9	16.143	0.327	4.208	163.9	15.7	38.8	92.9	0.939
44150.0	44440.6	0.378	350.9	6.3	3.92	0.966	69.2	0.360	0.938	120.7	430.3	0.600	1.276	4.05	1.296	106.8	198.7	12.9	0.393
44440.6	44592.0	0.393	166.4	7.2	2.75	1.086	70.6	0.358	0.638	131.2	415.9	0.410	0.867	4.12	1.657	103.9	209.3	14.9	0.449
7.96	11.33	252.1	+/+	32.3	1.2	8.1	0.0	0.437	1.423	274.9	10.1	15.396	0.384	3.737	165.3	16.6	44.3	93.2	0.997
44160.0	44444.8	0.357	359.3	10.7	3.95	0.965	70.5	0.340	0.932	120.8	427.2	0.615	1.249	3.54	1.294	105.5	207.2	12.2	0.364
44444.8	44592.0	0.364	172.3	7.6	2.69	1.083	72.2	0.336	0.635	132.3	410.4	0.421	0.849	3.80	1.655	102.0	215.2	14.8	0.419
7.52	10.45		+/+	34.7	0.0	14.8	0.0	0.467	1.423	281.0	7.6	14.754	0.446	3.355	167.1	17.3	49.9	93.8	1.051
44170.0	44449.1	0.338	7.8	15.1	3.95	0.964	71.7	0.322	0.925	121.1	424.5	0.627	1.223	2.98	1.291	104.3	215.7	11.1	0.339
44449.1	44592.0	0.339	178.0	8.2	2.66	1.079	73.6	0.318	0.632	133.8	405.1	0.431	0.832	3.48	1.652	100.4	221.2	14.5	0.393
7.14	9.73		+/+	37.2	0.0	21.6	0.0	0.498	1.423	287.6	4.5	14.048	0.516	3.133	168.9	17.8	55.5	94.0	1.100
44180.0	44453.5	0.320	16.4	19.2	3.90	0.963	72.7	0.306	0.919	121.7	422.0	0.637	1.200	2.37	1.288	103.3	224.1	9.4	0.316
44453.5	44592.0	0.316	183.6	8.8	2.68	1.075	74.9	0.302	0.628	135.5	399.9	0.439	0.818	3.16	1.650	98.9	227.2	13.9	0.373
6.78	9.15		+/+	40.0	0.0	28.5	0.0	0.531	1.423	294.0	0.9	13.446	0.593	2.925	170.2	18.2	61.1	94.5	1.141
44190.0	44457.9	0.303	25.2	23.0	3.82	0.961	73.7	0.292	0.912	122.5	419.7	0.646	1.178	1.74	1.286	102.4	232.5	7.4	0.296
44457.9	44592.0	0.296	189.0	9.6	2.73	1.072	76.1	0.288	0.625	137.5	395.0	0.445	0.804	2.83	1.647	97.6	232.9	13.0	0.357
6.45	8.69		+/+	43.0	0.0	35.4	0.0	0.564	1.423	300.3	-3.0	12.946	0.676	2.727	170.4	18.6	66.5	95.1	1.168
44200.0	44462.2	0.286	34.3	26.4	3.69	0.960	74.7	0.279	0.906	123.6	417.6	0.654	1.158	1.09	1.283	101.6	240.7	4.9	0.278
44462.2	44592.0	0.278	194.2	10.6	2.82	1.068	77.3	0.276	0.621	139.7	390.3	0.450	0.793	2.48	1.644	96.4	238.4	11.8	0.344
6.14	8.34		+/+	46.4	0.0	42.3	0.0	0.598	1.423	306.5	-7.2	12.553	0.768	2.536	168.8	19.0	71.8	95.8	1.179
44210.0	44466.5	0.269	43.6	29.4	3.52	0.958	75.6	0.266	0.900	124.9	415.6	0.660	1.139	0.43	1.281	100.8	248.8	2.1	0.262
44466.5	44592.0	0.262	199.0	11.9	2.97	1.065	78.3	0.265	0.618	142.1	385.8	0.454	0.782	2.10	1.642	95.3	243.6	10.3	0.335
5.85	8.07		+/+	50.3	0.0	49.2	0.0	0.631	1.423	312.6	-11.5	12.271	0.865	2.352	166.1	19.7	76.7	96.5	1.170
44220.0	44470.7	0.253	53.2	31.8	3.33	0.955	76.4	0.255	0.894	126.4	413.7	0.666	1.121	-0.20	1.279	100.1	256.6	-1.0	0.247
44470.7	44592.0	0.247	203.4	13.5	3.17	1.062	79.3	0.257	0.615	144.6	381.7	0.457	0.772	1.69	1.639	94.4	248.3	8.5	0.328
5.56	7.87		+/+	54.7	0.0	55.8	0.0	0.664	1.423	318.4	-15.9	12.109	0.968	2.176	162.6	20.8	81.4	97.2	1.138
44230.0	44474.8	0.236	62.9	33.6	3.11	0.952	77.3	0.244	0.888	128.3	412.0	0.671	1.104	-0.81	1.277	99.5	264.1	-4.4	0.235
44474.8	44592.0	0.235	207.3	15.5	3.45	1.059	80.3	0.249	0.612	147.2	377.8	0.459	0.764	1.23	1.637	93.5	252.6	6.2	0.323
5.29	7.74		+/+	59.7	0.0	62.4	0.0	0.696	1.423	323.9	-20.2	12.081	1.073	2.010	158.8	22.2	85.6	97.9	1.083
44240.0	44478.8	0.220	72.5	34.8	2.87	0.949	78.1	0.234	0.882	130.6	410.4	0.675	1.089	-1.38	1.274	98.9	271.4	-7.8	0.224
44478.8	44592.0	0.225	210.7	18.0	3.82	1.056	81.2	0.243	0.609	149.9	374.1	0.461	0.756	0.68	1.634	92.7	256.6	3.5	0.320
5.04	7.65	169.9	+/+	65.2	1.5	68.7	0.0	0.727	1.423	329.9	-24.5	12.033	1.175	1.894	154.8	23.9	89.5	98.1	1.006
44250.0	44482.8	0.204	82.0	35.2	2.62	0.945	79.0	0.226	0.876	133.1	409.1	0.678	1.074	-1.90	1.272	98.5	278.4	-11.1	0.216
44482.8	44592.0	0.216	213.7	21.4	4.34	1.053	82.2	0.237	0.606	152.8	370.7	0.462	0.749	0.0	1.632	92.0	260.2	-0.0	0.318
4.81	7.60	576.6	+/+	71.4	5.1	75.1	0.0	0.757	1.423	336.6	-28.8	11.899	1.266	1.830	150.7	25.7	93.2	97.4	0.903
44360.0	44482.8	0.232	79.5	-24.3	-10.74	0.923	97.0	0.187	0.882	214.0	379.9	0.718	1.047A	8.25	1.276	93.1	303.7	57.7	0.216
44482.8	44592.0	0.216	213.7	21.4	4.33	1.053	82.2	0.237	0.606	152.8	370.7	0.462	0.749	0.0	1.632	92.0	260.2	-0.0	0.318
5.2.	7.60	651.6	-/+	72.1	5.8	75.0	0.0	0.757	1.423	5.6	21.7	11.898	1.266	1.829	121.6	69.3	93.1	71.0	0.886
44370.0	44489.7	0.239	81.1	-17.4	-9.76	0.927	99.0	0.205	0.891	221.1	388.3	0.709	1.074A	6.90	1.281	94.7	305.4	46.4	0.212
44489.7	44592.0	0.212	217.2	30.3	5.88	1.049	83.8	0.229	0.601	158.3	365.2	0.463	0.739	-1.83	1.628	91.0	265.8	-9.3	0.321
5.33	7.70		-/+	67.4	0.0	86.1	0.0	0.810	1.423	357.9	11.4	11.801	1.319	1.802	130.2	57.7	98.6	88.2	1.057
							ARRIVAL DATE = 2444594.0												
44140.0	44437.5	0.412	342.1	1.9	4.03	0.967	67.1	0.393	0.945	121.2	435.7	0.574	1.316	4.63	1.299	109.1	190.6	13.0	0.441
44437.5	44594.0	0.442	161.8	7.6	3.30	1.089	68.0	0.395	0.641	130.7	425.9	0.388	0.894	4.55	1.653	107.2	203.4	13.5	0.535
8.69	13.81	669.1	+/+	28.9	2.9	3.2	0.0	0.416	1.431	269.6	10.5	16.523	0.304	4.456	164.8	14.9	33.4	93.6	0.916
44150.0	44441.5	0.387	350.7	6.3	4.06	0.966	68.7	0.369	0.938	121.0	432.1	0.592	1.284	4.14	1.296	107.5	199.1	12.7	0.406
44441.5	44594.0	0.406	167.7	7.9	3.15	1.085	69.9	0.368	0.637	131.4	420.2	0.403	0.872	4.16	1.651	105.1	208.7	13.6	0.493
8.15	12.58	362.9	+/+	31.2	1.7	9.6	0.0	0.444	1.431	275.8	8.6	15.702	0.359	3.927	166.1	15.8	38.3	93.8	0.974
44160.0	44445.7	0.364	359.2	10.7	4.06	0.965	70.1	0.347	0.932	121.0	428.8	0.608	1.255	3.61	1.294	106.0	207.6	12.0	0.375
44445.7	44594.0	0.376	173.6	8.4	3.05	1.082	71.6	0.345	0.634	132.4	414.6	0.415	0.853	3.79	1.649	103.2	214.1	13.4	0.457
7.68	11.54	91.7	+/+	33.7	0.5	16.2	0.0	0.473	1.431	281.9	6.2	15.004	0.420	3.499	167.6	16.5	43.2	94.3	1.030

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44170.0	44449.9	0.344	7.7	15.0	4.03	0.964	71.3	0.328	0.925	121.3	425.9	0.621	1.228	3.02	1.291	104.8	216.1	10.9	0.348
44449.9	44594.0	0.348	179.3	8.9	2.99	1.078	73.2	0.325	0.631	133.8	409.3	0.426	0.836	3.43	1.646	101.5	219.4	13.1	0.426
7.26	10.67		+/+	36.3	0.0	22.9	0.0	0.504	1.431	288.2	3.1	14.310	0.489	3.211	169.1	17.0	48.2	94.7	1.080
44180.0	44454.2	0.325	16.4	19.1	3.96	0.963	72.5	0.311	0.918	121.8	423.2	0.633	1.204	2.40	1.288	103.7	224.5	9.3	0.324
44454.2	44594.0	0.324	184.8	9.6	2.98	1.075	74.6	0.307	0.628	135.5	404.2	0.435	0.820	3.08	1.643	100.0	224.7	12.5	0.401
6.88	9.95		+/+	39.1	0.0	29.7	0.0	0.537	1.431	294.6	-0.4	13.665	0.565	2.987	170.0	17.5	53.1	95.1	1.122
44190.0	44458.5	0.307	25.2	23.0	3.85	0.961	73.5	0.296	0.912	122.6	420.8	0.642	1.182	1.75	1.286	102.7	232.8	7.3	0.302
44458.5	44594.0	0.302	190.2	10.4	3.01	1.071	75.9	0.292	0.624	137.4	399.3	0.442	0.807	2.72	1.641	98.6	229.8	11.7	0.380
6.53	9.36		+/+	42.3	0.0	36.5	0.0	0.569	1.431	300.9	-4.3	13.132	0.648	2.775	169.6	17.9	58.0	95.6	1.150
44200.0	44462.8	0.289	34.3	26.4	3.71	0.960	74.5	0.282	0.906	123.6	418.5	0.651	1.161	1.09	1.283	101.8	241.0	4.9	0.283
44462.8	44594.0	0.283	195.2	11.4	3.08	1.068	77.0	0.279	0.621	139.5	394.7	0.448	0.794	2.35	1.638	97.4	234.8	10.6	0.363
6.20	8.88		+/+	45.8	0.0	43.3	0.0	0.602	1.431	307.0	-8.4	12.709	0.739	2.572	167.8	18.4	62.7	96.2	1.162
44210.0	44467.0	0.272	43.7	29.3	3.53	0.958	75.4	0.269	0.899	124.8	416.4	0.658	1.141	0.44	1.281	101.0	249.1	2.1	0.266
44467.0	44594.0	0.266	200.0	12.7	3.20	1.065	78.2	0.268	0.618	141.8	390.3	0.452	0.783	1.97	1.636	96.3	239.6	9.2	0.350
5.89	8.49		+/+	49.7	0.0	50.0	0.0	0.635	1.431	313.0	-12.6	12.403	0.837	2.378	165.0	19.2	67.3	96.8	1.154
44220.0	44471.2	0.255	53.2	31.7	3.33	0.955	76.3	0.257	0.893	126.4	414.4	0.664	1.123	-0.20	1.279	100.3	256.8	-1.0	0.251
44471.2	44594.0	0.251	204.3	14.2	3.38	1.062	79.2	0.258	0.615	144.3	386.2	0.456	0.773	1.55	1.633	95.3	244.0	7.5	0.339
5.60	8.18		+/+	54.2	0.0	56.6	0.0	0.667	1.431	318.8	-16.8	12.218	0.941	2.195	161.6	20.3	71.6	97.5	1.125
44230.0	44475.2	0.238	62.9	33.5	3.10	0.952	77.2	0.246	0.887	128.3	412.6	0.669	1.106	-0.81	1.277	99.6	264.4	-4.3	0.238
44475.2	44594.0	0.238	208.2	16.1	3.62	1.059	80.2	0.250	0.612	146.9	382.4	0.459	0.765	1.09	1.631	94.4	248.1	5.4	0.330
5.32	7.94		+/+	59.2	0.0	63.0	0.0	0.699	1.431	324.3	-20.9	12.166	1.048	2.024	158.0	21.8	75.6	98.2	1.074
44240.0	44479.1	0.221	72.6	34.7	2.86	0.949	78.1	0.236	0.882	130.5	410.9	0.674	1.089	-1.38	1.275	99.0	271.6	-7.7	0.227
44479.1	44594.0	0.227	211.5	18.4	3.94	1.057	81.2	0.243	0.609	149.6	378.9	0.461	0.757	0.57	1.629	93.7	251.8	2.9	0.324
5.06	7.76	188.4	+/+	64.7	1.6	69.3	0.0	0.729	1.431	330.3	-25.0	12.067	1.154	1.910	154.3	23.6	79.3	98.1	1.001
44250.0	44483.0	0.205	82.0	35.2	2.61	0.945	78.9	0.226	0.876	133.1	409.4	0.678	1.075	-1.90	1.272	98.5	278.5	-11.1	0.218
44483.0	44594.0	0.218	214.4	21.4	4.36	1.054	82.1	0.237	0.606	152.5	375.6	0.462	0.750	-0.04	1.626	93.0	255.3	-0.2	0.319
4.82	7.64	558.9	+/+	70.8	4.9	75.4	0.0	0.759	1.431	336.9	-29.0	11.918	1.252	1.839	150.5	25.5	82.7	97.5	0.908
44360.0	44482.8	0.233	79.6	-24.5	-10.81	0.923	97.0	0.187	0.882	214.0	379.9	0.718	1.047A	8.32	1.276	93.1	303.6	57.9	0.218
44482.8	44594.0	0.218	214.3	21.3	4.34	1.054	82.1	0.237	0.606	152.3	375.7	0.462	0.750	0.0	1.626	93.0	255.2	-0.1	0.319
5.24	7.64	666.2	-/+	71.7	5.9	75.2	0.0	0.758	1.431	6.3	22.0	11.921	1.250	1.840	121.4	69.4	82.6	70.5	0.884
44370.0	44489.4	0.237	80.8	-16.9	-9.59	0.927	99.1	0.205	0.892	221.2	388.1	0.709	1.074A	6.73	1.282	94.7	305.4	45.7	0.209
44489.4	44594.0	0.209	217.9	28.6	5.50	1.050	83.7	0.229	0.602	157.6	370.5	0.464	0.740	-1.48	1.623	91.9	260.5	-7.6	0.317
5.31	7.57		-/+	68.4	0.0	85.7	0.0	0.809	1.431	358.4	12.2	11.765	1.353	1.780	131.3	57.5	87.9	87.4	1.055
44380.0	44498.7	0.264	86.4	-15.2	-10.42	0.928	100.8	0.225	0.897	225.3	397.4	0.695	1.100A	7.24	1.286	96.6	310.5	41.7	0.242
44498.7	44594.0	0.242	218.2	46.1	9.61	1.046	86.2	0.220	0.597	166.1	364.3	0.465	0.728	-6.00	1.618	90.8	266.7	-29.2	0.347
5.75	8.41	490.0	-/+	62.7	3.9	100.5	0.0	0.878	1.431	353.5	-4.6	12.327	1.013	2.037	125.6	49.7	93.6	107.0	0.934

ARRIVAL DATE = 2444596.0

44140.0	44438.6	0.425	341.8	1.9	4.24	0.967	66.3	0.405	0.945	121.7	438.0	0.562	1.328	4.78	1.299	110.1	191.1	12.8	0.461
44438.6	44596.0	0.461	163.3	8.1	3.74	1.087	67.1	0.410	0.639	131.1	430.0	0.377	0.902	4.65	1.650	108.7	204.2	12.4	0.589
8.99	15.40	834.0	+/+	27.7	3.5	5.0	0.0	0.424	1.438	270.7	9.2	16.986	0.279	4.766	165.6	14.1	28.7	94.3	0.886
44150.0	44442.6	0.398	350.5	6.3	4.23	0.966	68.1	0.379	0.938	121.4	434.2	0.583	1.293	4.26	1.296	108.3	199.6	12.5	0.423
44442.6	44596.0	0.423	169.3	8.5	3.54	1.084	69.1	0.381	0.636	131.6	424.2	0.394	0.878	4.20	1.647	106.4	209.0	12.4	0.541
8.39	13.99	510.6	+/+	30.1	2.3	11.4	0.0	0.451	1.438	277.0	7.3	16.079	0.332	4.167	166.7	15.0	33.0	94.3	0.945
44160.0	44446.7	0.374	359.0	10.7	4.19	0.965	69.6	0.356	0.931	121.3	430.7	0.600	1.263	3.69	1.294	106.7	208.1	11.8	0.389
44446.7	44596.0	0.389	175.1	9.0	3.40	1.080	71.0	0.356	0.633	132.5	418.6	0.408	0.858	3.79	1.645	104.4	213.8	12.1	0.500
7.87	12.80	224.2	+/+	32.6	1.1	17.8	0.0	0.481	1.438	283.1	4.9	15.312	0.391	3.686	168.0	15.6	37.4	94.8	1.002
44170.0	44450.9	0.352	7.6	15.0	4.13	0.964	70.9	0.335	0.925	121.5	427.6	0.615	1.235	3.08	1.291	105.4	216.6	10.7	0.360
44450.9	44596.0	0.360	180.8	9.5	3.31	1.077	72.6	0.334	0.630	133.8	413.3	0.420	0.840	3.39	1.643	102.6	218.6	11.8	0.465
7.41	11.79		+/+	35.2	0.0	24.4	0.0	0.512	1.438	289.0	2.0	14.650	0.457	3.303	169.2	16.1	41.8	95.4	1.053
44180.0	44455.1	0.331	16.3	19.1	4.03	0.963	72.1	0.317	0.918	121.9	424.8	0.627	1.209	2.44	1.288	104.2	225.0	9.2	0.334
44455.1	44596.0	0.334	186.3	10.2	3.27	1.074	74.1	0.315	0.627	135.4	408.2	0.429	0.824	3.00	1.640	101.0	223.3	11.2	0.436
7.00	10.94		+/+	38.1	0.0	31.1	0.0	0.543	1.438	295.4	-1.5	13.957	0.531	3.061	169.7	16.6	46.2	95.7	1.095
44190.0	44459.4	0.312	25.2	22.9	3.90	0.961	73.2	0.301	0.912	122.6	422.2	0.637	1.186	1.78	1.286	103.1	233.3	7.2	0.311
44459.4	44596.0	0.311	191.6	11.0	3.28	1.071	75.5	0.298	0.623	137.3	403.4	0.437	0.809	2.62	1.638	99.6	227.9	10.4	0.411
6.63	10.22		+/+	41.3	0.0	37.8	0.0	0.576	1.438	301.6	-5.3	13.383	0.613	2.834	168.9	17.0	50.6	96.2	1.125
44200.0	44463.6	0.294	34.4	26.3	3.73	0.959	74.2	0.286	0.905	123.6	419.8	0.646	1.164	1.11	1.283	102.2	241.5	4.8	0.290
44463.6	44596.0	0.290	196.6	12.0	3.33	1.067	75.7	0.284	0.620	139.4	398.8	0.444	0.796	2.23	1.635	98.3	232.3	9.3	0.390
6.28	9.62		+/+	44.9	0.0	44.6	0.0	0.608	1.438	307.8	-9.4	12.927	0.703	2.618	166.9	17.6	54.8	96.7	1.138
44210.0	44467.8	0.276	43.8	29.2	3.54	0.957	75.2	0.272	0.899	124.8	417.6	0.654	1.144	0.44	1.281	101.3	249.5	2.0	0.272
44467.8	44596.0	0.272	201.3	13.2	3.42	1.064	77.9	0.272	0.617	141.6	394.4	0.449	0.785	1.83	1.633	97.2	236.6	8.0	0.372
5.96	9.12		+/+	48.9	0.0	51.2	0.0	0.641	1.438	313.7	-13.5	12.591	0.800	2.415	164.1	18.4	58.8	97.3	1.132
44220.0	44471.9	0.258	53.4	31.6	3.32	0.955	76.1	0.260	0.893	126.4	415.5	0.661	1.125	-0.20	1.279	100.6	257.2	-1.0	0.256
44471.9	44596.0	0.256	205.6	14.7	3.57	1.061	79.0	0.262	0.614	144.1	390.4	0.453	0.775	1.41	1.630	96.2	240.6	6.4	0.358
5.65	8.72		+/+	53.4	0.0	57.7	0.0	0.673	1.438	319.4	-17.5	12.379	0.903	2.224	160.8	19.6	62.7	97.9	1.105
44230.0	44475.9	0.241	63.1	33.3	3.09	0.952	77.0	0.248	0.887	128.2	413.5	0.667	1.108	-0.82	1.277	99.9	264.7	-4.3	0.242
44475.9	44596.0	0.242	209.4	16.5	3.78	1.059	80.0	0.253	0.611	146.6	386.6	0.457	0.766	0.95	1.628	95.3	244.4	4.5	0.346
5.36	8.39		+/+	58.5	0.0	64.0	0.0	0.704	1.438	324.9	-21.5	12.299	1.010	2.048	157.3	21.1	66.3	98.5	1.059
44240.0	44479.7	0.223	72.8	34.5	2.84	0.949	77.9	0.238	0.882	130.4	411.7	0.672	1.091	-1.39	1.275	99.2	271.9	-7.6	0.230
44479.7	44596.0	0.230	212.7	18.7	4.05	1.056	81.0	0.245	0.609	149.3	383.2	0.459	0.758	0.45	1.626	94.5	247.8	2.2	0.337
5.09	8.13	227.0	+/+	64.0	1.9	70.2	0.0	0.734	1.438	331.1	-25.4	12.127	1.118	1.939	153.8	23.0	69.7	98.2	0.992
44250.0	44483.5	0.207	82.2	34.9	2.59	0.945	78.8	0.228	0.876	133.0	410.1	0.676	1.076	-1.90	1.272	98.7	278.8	-10.9	0.220
44483.5	44596.0	0.220	215.5	21.4	4.41	1.054	81.9	0.239	0.606	152.1	380.0	0.461	0.751	-0.12	1.624	93.8	251.0	-0.6	0.330
4.84	7.93	567.6	+/+	70.0	5.0	76.2	0.0	0.763	1.438	337.5	-29.1	11.963	1.221	1.860	150.4	25.0	72.9	97.5	0.908

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44360.0	44483.0	0.236	79.9	-24.9	-11.01	0.923	97.0	0.187	0.882	213.9	380.1	0.718	1.047A	8.51	1.275	93.1	303.4	58.5	0.221
44483.0	44596.0	0.221	215.2	21.0	4.36	1.054	81.8	0.240	0.606	151.8	380.3	0.461	0.752	-0.04	1.624	93.9	250.7	-0.2	0.330
5.28	7.95	744.5	-/+	71.2	6.5	75.5	0.0	0.759	1.438	7.6	22.4	11.978	1.211	1.867	121.0	69.5	72.6	69.7	0.868
44370.0	44489.5	0.237	80.9	-17.0	-9.61	0.927	99.1	0.205	0.892	221.2	388.2	0.709	1.074A	6.75	1.282	94.7	305.4	45.8	0.210
44489.5	44596.0	0.210	218.9	27.2	5.28	1.050	83.5	0.230	0.602	156.9	375.2	0.464	0.741	-1.30	1.620	92.8	255.7	-6.5	0.323
5.31	7.73	13.7	-/+	68.5	0.1	85.8	0.0	0.809	1.438	359.5	13.2	11.792	1.348	1.779	131.7	57.5	77.6	86.4	1.046
44380.0	44496.7	0.246	84.1	-9.1	-8.32	0.931	101.1	0.227	0.902	226.9	395.8	0.697	1.106A	5.17	1.288	96.4	310.2	32.6	0.214
44496.7	44596.0	0.214	220.3	38.0	7.26	1.047	85.4	0.222	0.598	163.5	370.3	0.465	0.731	-3.65	1.617	91.9	260.4	-18.3	0.327
5.46	7.86	401.2	-/+	70.6	3.6	97.3	0.0	0.863	1.438	354.6	-5.1	11.864	1.292	1.813	134.8	45.0	82.7	102.7	0.945
							ARRIVAL DATE = 2444598.0												
44150.0	44443.9	0.411	350.2	6.3	4.43	0.966	67.3	0.391	0.938	121.8	436.6	0.571	1.304	4.40	1.296	109.2	200.2	12.3	0.442
44443.9	44598.0	0.442	171.0	9.0	3.93	1.082	68.2	0.396	0.635	132.0	428.1	0.383	0.886	4.25	1.647	107.8	209.9	11.3	0.596
8.68	15.58	696.2	+/+	28.9	3.0	13.3	0.0	0.460	1.442	278.3	6.2	16.536	0.303	4.464	167.2	14.1	28.5	94.9	0.911
44160.0	44447.9	0.385	358.9	10.7	4.35	0.965	68.9	0.366	0.931	121.6	432.9	0.590	1.272	3.79	1.294	107.5	208.7	11.6	0.406
44447.9	44598.0	0.406	176.8	9.4	3.75	1.079	70.2	0.369	0.632	132.8	422.5	0.399	0.864	3.78	1.645	105.6	214.3	11.0	0.549
8.10	14.23	393.8	+/+	31.4	1.9	19.7	0.0	0.489	1.442	284.4	3.9	15.689	0.360	3.919	168.4	14.7	32.4	95.3	0.968
44170.0	44452.0	0.361	7.5	14.9	4.25	0.964	70.3	0.344	0.924	121.7	429.6	0.606	1.243	3.15	1.291	106.1	217.2	10.5	0.374
44452.0	44598.0	0.374	182.5	9.9	3.62	1.076	71.9	0.345	0.628	133.9	417.1	0.412	0.845	3.35	1.642	103.7	218.6	10.5	0.510
7.61	13.08	139.4	+/+	34.1	0.7	26.2	0.0	0.520	1.442	290.4	0.9	14.972	0.423	3.480	169.3	15.1	36.3	95.9	1.020
44180.0	44456.2	0.339	16.3	19.0	4.12	0.962	71.6	0.325	0.918	122.1	426.6	0.620	1.216	2.49	1.288	104.8	225.6	9.0	0.346
44456.2	44598.0	0.346	188.0	10.6	3.55	1.072	73.5	0.324	0.625	135.4	412.0	0.422	0.828	2.93	1.640	102.0	222.8	9.9	0.476
7.16	12.09		+/+	37.0	0.0	32.8	0.0	0.552	1.442	296.4	-2.5	14.321	0.495	3.148	169.4	15.6	40.2	96.4	1.063
44190.0	44460.4	0.319	25.2	22.8	3.96	0.961	72.8	0.307	0.911	122.7	423.9	0.631	1.192	1.81	1.286	103.7	233.9	7.0	0.321
44460.4	44598.0	0.321	193.3	11.4	3.53	1.069	75.0	0.307	0.622	137.2	407.2	0.431	0.813	2.52	1.637	100.5	226.9	9.1	0.447
6.76	11.26		+/+	40.3	0.0	39.5	0.0	0.584	1.442	302.6	-6.3	13.701	0.574	2.905	168.3	16.0	44.1	96.8	1.093
44200.0	44464.6	0.299	34.4	26.1	3.77	0.959	73.9	0.292	0.905	123.6	421.4	0.641	1.169	1.12	1.283	102.7	242.0	4.7	0.299
44464.6	44598.0	0.299	198.3	12.4	3.55	1.066	76.3	0.291	0.619	139.2	402.6	0.439	0.799	2.11	1.635	99.2	230.9	8.1	0.422
6.39	10.55		+/+	43.9	0.0	46.1	0.0	0.516	1.442	308.7	-10.2	13.206	0.661	2.676	166.2	16.6	47.8	97.3	1.108
44210.0	44468.7	0.281	43.9	29.0	3.55	0.957	74.9	0.277	0.899	124.8	419.0	0.650	1.148	0.45	1.281	101.7	250.0	2.0	0.280
44468.7	44598.0	0.280	202.9	13.5	3.62	1.063	77.5	0.278	0.616	141.4	398.3	0.445	0.787	1.69	1.632	98.1	234.8	6.8	0.401
6.04	9.95		+/+	47.9	0.0	57.6	0.0	0.548	1.442	314.6	-14.2	12.835	0.755	2.462	163.4	17.4	51.4	97.8	1.104
44220.0	44472.7	0.262	53.5	31.4	3.32	0.955	75.9	0.264	0.893	126.3	416.8	0.657	1.129	-0.21	1.279	100.9	257.7	-1.0	0.263
44472.7	44598.0	0.263	207.2	15.0	3.74	1.060	78.6	0.267	0.613	143.8	394.3	0.449	0.777	1.26	1.630	97.0	238.4	5.3	0.384
5.72	9.45		+/+	52.5	0.0	59.1	0.0	0.679	1.442	320.4	-18.1	12.591	0.856	2.263	160.2	18.7	54.9	98.3	1.081
44230.0	44476.7	0.244	63.3	33.1	3.07	0.952	76.8	0.252	0.887	128.1	414.7	0.664	1.110	-0.82	1.277	100.2	265.2	-4.2	0.248
44476.7	44598.0	0.248	211.0	16.7	3.92	1.058	79.7	0.257	0.610	146.4	390.6	0.453	0.767	0.81	1.628	96.1	241.7	3.5	0.369
5.42	9.04	42.4	+/+	57.5	0.3	65.3	0.0	0.710	1.442	326.0	-22.0	12.437	0.962	2.091	156.8	20.3	58.2	98.6	1.039
44240.0	44480.5	0.226	73.0	34.2	2.81	0.948	77.7	0.241	0.881	130.3	412.8	0.669	1.093	-1.39	1.275	99.5	272.4	-7.5	0.235
44480.5	44598.0	0.235	214.3	18.7	4.15	1.055	80.7	0.249	0.608	149.0	387.1	0.456	0.759	0.32	1.625	95.3	244.9	1.5	0.357
5.13	8.71	283.8	+/+	62.9	2.3	71.4	0.0	0.740	1.442	332.2	-25.7	12.214	1.070	1.981	153.5	22.2	61.2	98.2	0.979
44250.0	44484.2	0.209	82.4	34.6	2.55	0.944	78.7	0.230	0.876	132.8	411.1	0.674	1.078	-1.91	1.272	98.9	279.2	-10.7	0.224
44484.2	44598.0	0.225	217.1	21.2	4.46	1.053	81.7	0.242	0.605	151.7	384.0	0.459	0.752	-0.22	1.623	94.6	247.7	-1.0	0.348
4.87	8.44	597.1	+/+	68.9	5.1	77.3	0.0	0.768	1.442	338.6	-29.2	12.033	1.175	1.894	150.3	24.3	64.1	97.6	0.903
44260.0	44487.8	0.192	91.3	34.5	2.28	0.940	79.6	0.222	0.871	135.8	409.6	0.678	1.063	-2.36	1.270	98.4	285.8	-13.9	0.216
44487.8	44598.0	0.216	219.3	24.2	4.87	1.051	82.7	0.236	0.603	154.6	381.1	0.460	0.746	-0.84	1.622	94.0	250.4	-4.0	0.341
4.64	8.23	990.6	+/+	75.2	8.8	83.1	0.0	0.796	1.442	345.1	-32.6	11.893	1.270	1.827	147.1	26.4	66.8	96.8	0.811
44360.0	44483.3	0.239	80.3	-25.6	-11.32	0.922	97.0	0.187	0.882	213.7	390.5	0.717	1.046A	8.81	1.275	93.2	303.1	59.4	0.227
44483.3	44598.0	0.227	216.5	20.6	4.38	1.054	81.5	0.244	0.606	151.1	384.7	0.458	0.754	-0.09	1.624	94.8	247.1	-0.4	0.350
5.34	8.49	894.7	-/+	70.7	7.6	76.0	0.0	0.762	1.442	9.5	23.0	12.069	1.153	1.911	120.3	69.8	63.5	68.4	0.839
44370.0	44489.7	0.239	81.1	-17.5	-9.79	0.927	99.0	0.205	0.891	221.1	388.3	0.709	1.074A	6.93	1.281	94.7	305.4	46.5	0.212
44489.7	44598.0	0.213	220.3	26.0	5.13	1.050	83.2	0.234	0.602	156.2	379.6	0.461	0.742	-1.21	1.621	93.7	251.7	-5.8	0.338
5.34	8.15	79.6	-/+	68.2	0.7	86.1	0.0	0.810	1.442	1.3	14.6	11.837	1.312	1.800	131.6	57.8	68.2	85.0	1.028
44380.0	44496.1	0.244	83.5	-7.7	-7.89	0.932	101.2	0.227	0.903	227.4	395.3	0.698	1.108A	4.75	1.288	96.3	309.9	30.5	0.209
44496.1	44598.0	0.209	222.0	34.0	6.43	1.047	84.9	0.225	0.598	161.9	375.2	0.463	0.733	-2.87	1.618	92.8	255.7	-14.0	0.334
5.41	8.05	350.8	-/+	71.9	3.2	96.3	0.0	0.859	1.442	356.0	-3.6	11.780	1.358	1.773	138.7	44.1	72.6	100.3	0.955
							ARRIVAL DATE = 2444600.0												
44150.0	44445.2	0.427	349.9	6.2	4.67	0.965	66.4	0.406	0.937	122.4	439.2	0.557	1.318	4.57	1.296	110.3	200.9	12.0	0.465
44445.2	44600.0	0.465	172.8	9.3	4.32	1.081	67.0	0.414	0.633	132.4	432.0	0.371	0.895	4.30	1.649	109.2	211.4	10.2	0.656
9.03	17.33	918.3	+/+	27.7	3.8	15.4	0.0	0.470	1.444	279.8	5.3	17.082	0.274	4.831	167.6	13.2	24.4	95.6	0.871
44160.0	44449.2	0.398	358.6	10.6	4.54	0.964	68.1	0.379	0.931	122.0	435.4	0.578	1.283	3.92	1.294	108.5	209.4	11.4	0.425
44449.2	44600.0	0.425	178.7	9.7	4.08	1.077	69.2	0.384	0.630	133.0	426.3	0.388	0.872	3.78	1.647	106.9	215.4	9.9	0.604
8.39	15.81	598.5	+/+	30.2	2.7	21.7	0.0	0.499	1.444	286.0	2.9	16.142	0.327	4.207	168.6	13.7	27.9	95.8	0.929
44170.0	44453.3	0.372	7.4	14.8	4.39	0.963	69.7	0.355	0.924	122.0	431.9	0.596	1.252	3.24	1.291	106.9	217.9	10.3	0.391
44453.3	44600.0	0.391	184.4	10.2	3.92	1.074	71.1	0.358	0.627	134.1	420.8	0.402	0.851	3.30	1.644	104.9	219.4	9.4	0.559
7.84	14.52	327.9	+/+	32.9	1.6	28.2	0.0	0.530	1.444	291.9	-0.0	15.350	0.388	3.709	169.3	14.1	31.5	96.3	0.981
44180.0	44457.4	0.349	16.2	18.9	4.22	0.962	71.0	0.334	0.918	122.3	428.8	0.611	1.224	2.55	1.288	105.5	226.2	8.8	0.361
44457.4	44600.0	0.361	189.9	10.9	3.81	1.071	72.8	0.336	0.624	135.4	415.7	0.414	0.833	2.84	1.642	103.1	223.2	8.8	0.521
7.36	13.40	116.8	+/+	35.8	0.6	34.8	0.0	0.561	1.444	297.8	-3.4	14.679	0.455	3.306	169.1	14.4	35.0	96.9	1.025
44190.0	44461.6	0.327	25.2	22.6	4.03	0.961	72.3	0.315	0.911	122.8	425.9	0.624	1.198	1.84	1.286	104.3	234.5	6.9	0.334
44461.6	44600.0	0.334	195.2	11.6	3.76	1.067	74.3	0.317	0.621	137.1	410.8	0.424	0.817	2.41	1.640	101.6	226.9	7.9	0.488
6.92	12.45		+/+	39.1	0.0	41.3	0.0	0.593	1.444	303.8	-7.0	14.089	0.531	2.990	167.9	14.8	38.5	97.5	1.056

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44200.0	44465.7	0.307	34.5	26.0	3.81	0.959	73.4	0.298	0.905	123.7	423.2	0.635	1.175	1.14	1.283	103.2	242.6	4.6	0.311
44465.7	44600.0	0.311	200.2	12.6	3.76	1.064	75.7	0.300	0.617	139.1	406.2	0.432	0.803	1.98	1.637	100.2	230.5	6.9	0.460
6.52	11.63		+/+	42.7	0.0	47.9	0.0	0.625	1.444	309.9	-10.9	13.548	0.614	2.747	165.7	15.4	41.8	97.9	1.072
44210.0	44469.8	0.287	44.0	28.8	3.57	0.957	74.5	0.283	0.899	124.8	420.7	0.644	1.153	0.45	1.281	102.2	250.6	2.0	0.290
44469.8	44600.0	0.290	204.8	13.7	3.80	1.062	77.0	0.286	0.615	141.2	401.9	0.439	0.790	1.54	1.635	98.9	233.9	5.7	0.436
6.15	10.94		+/+	46.8	0.0	54.4	0.0	0.657	1.444	315.8	-14.8	13.136	0.705	2.520	162.8	16.3	45.0	98.3	1.072
44220.0	44473.8	0.267	53.7	31.1	3.31	0.955	75.5	0.269	0.893	126.2	418.4	0.652	1.133	-0.21	1.279	101.4	258.3	-1.0	0.272
44473.8	44600.0	0.272	209.1	15.0	3.90	1.059	78.2	0.274	0.612	143.6	397.9	0.444	0.779	1.11	1.632	97.9	237.1	4.3	0.415
5.81	10.36		+/+	51.3	0.0	60.8	0.0	0.688	1.444	321.5	-18.6	12.854	0.803	2.312	159.7	17.6	48.1	98.8	1.053
44230.0	44477.7	0.249	63.5	32.8	3.04	0.952	76.5	0.256	0.887	128.0	416.2	0.660	1.114	-0.83	1.277	100.6	265.8	-4.1	0.256
44477.7	44600.0	0.256	212.9	16.6	4.05	1.056	79.3	0.254	0.609	146.1	394.2	0.448	0.769	0.65	1.630	96.9	240.2	2.7	0.398
5.49	9.87	138.6	+/+	56.2	1.0	67.0	0.0	0.718	1.444	327.6	-22.4	12.572	0.906	2.159	156.5	19.2	51.0	98.7	1.017
44240.0	44481.5	0.230	73.2	33.8	2.77	0.948	77.5	0.244	0.881	130.1	414.2	0.666	1.096	-1.40	1.275	99.8	273.0	-7.3	0.242
44481.5	44600.0	0.242	216.2	18.6	4.25	1.054	80.4	0.255	0.606	148.7	390.8	0.452	0.761	0.17	1.628	96.1	243.0	0.7	0.384
5.19	9.46	358.6	+/+	61.7	2.9	73.0	0.0	0.747	1.444	333.7	-25.9	12.328	1.012	2.037	153.4	21.2	53.8	98.3	0.963
44250.0	44485.1	0.212	82.6	34.2	2.50	0.944	78.5	0.234	0.876	132.7	412.3	0.671	1.080	-1.92	1.272	99.2	279.8	-10.5	0.230
44485.1	44600.0	0.230	219.0	20.8	4.51	1.052	81.4	0.247	0.604	151.3	387.7	0.455	0.753	-0.34	1.626	95.4	245.5	-1.5	0.372
4.92	9.13	644.6	+/+	67.5	5.4	78.8	0.0	0.775	1.444	340.0	-29.2	12.128	1.118	1.939	150.3	23.4	56.4	97.7	0.895
44260.0	44488.7	0.195	91.6	34.1	2.23	0.940	79.4	0.224	0.870	135.6	410.8	0.675	1.065	-2.37	1.270	98.6	286.3	-13.6	0.221
44488.7	44600.0	0.221	721.2	23.5	4.86	1.050	82.4	0.241	0.632	154.1	384.8	0.457	0.747	-0.92	1.624	94.7	247.9	-4.1	0.363
4.67	8.87	999.5	+/+	73.6	8.7	84.5	0.0	0.802	1.444	346.3	-32.4	11.969	1.216	1.863	147.4	25.6	58.8	96.9	0.813
44370.0	44490.0	0.242	81.5	-18.4	-10.11	0.926	99.0	0.205	0.891	220.8	388.7	0.709	1.073A	7.24	1.281	94.8	305.3	47.7	0.217
44490.0	44600.0	0.218	222.0	24.7	5.02	1.049	82.7	0.239	0.601	155.3	383.7	0.458	0.744	-1.17	1.623	94.5	248.8	-5.3	0.360
5.39	8.78	193.3	-/+	67.6	1.7	86.7	0.0	0.813	1.444	3.8	16.2	11.918	1.252	1.838	131.0	58.3	59.7	83.2	0.998
44380.0	44496.1	0.244	83.6	-7.9	-7.92	0.932	101.2	0.227	0.903	227.4	395.4	0.698	1.108A	4.78	1.288	96.3	309.9	30.7	0.209
44496.1	44600.0	0.209	224.1	31.4	6.00	1.046	84.4	0.230	0.598	160.7	379.4	0.460	0.735	-2.52	1.621	93.6	252.3	-11.7	0.351
5.41	8.53	314.9	-/+	71.4	2.9	96.4	0.0	0.859	1.444	357.9	-1.4	11.786	1.353	1.776	140.6	44.2	63.8	98.5	0.965
ARRIVAL DATE = 2444602.0																			
44160.0	44450.6	0.414	358.4	10.5	4.76	0.964	67.2	0.393	0.930	122.6	438.2	0.564	1.296	4.07	1.294	109.6	210.1	11.1	0.448
44450.6	44602.0	0.448	180.7	9.8	4.41	1.075	68.0	0.402	0.628	133.4	430.0	0.376	0.881	3.76	1.652	108.4	217.0	8.9	0.664
8.74	17.57	837.3	+/+	28.9	3.6	24.0	0.0	0.510	1.444	287.7	2.2	16.684	0.295	4.563	168.9	12.7	23.9	96.3	0.886
44170.0	44454.7	0.386	7.2	14.7	4.56	0.963	68.9	0.367	0.924	122.4	434.5	0.584	1.263	3.35	1.291	107.9	218.6	10.1	0.411
44454.7	44602.0	0.411	186.5	10.4	4.20	1.072	70.1	0.374	0.625	134.3	424.4	0.391	0.859	3.24	1.650	106.2	220.7	8.4	0.614
8.13	16.12	550.9	+/+	31.6	2.6	30.4	0.0	0.540	1.444	293.7	-0.7	15.803	0.351	3.991	169.4	13.0	27.2	96.7	0.938
44180.0	44458.8	0.361	16.1	18.8	4.35	0.962	70.4	0.345	0.917	122.5	431.2	0.601	1.234	2.62	1.288	106.4	227.0	8.6	0.378
44458.8	44602.0	0.378	192.0	11.0	4.06	1.069	71.9	0.350	0.622	135.5	419.2	0.404	0.839	2.75	1.647	104.3	224.2	7.7	0.571
7.60	14.86	323.1	+/+	34.5	1.6	36.9	0.0	0.571	1.444	299.7	-4.1	15.060	0.415	3.532	169.0	13.2	30.4	97.2	0.982
44190.0	44462.9	0.337	25.2	22.5	4.11	0.961	71.7	0.325	0.911	123.0	428.1	0.615	1.207	1.89	1.286	105.0	235.3	6.7	0.349
44462.9	44602.0	0.349	197.3	11.7	3.98	1.065	73.6	0.329	0.619	137.1	414.2	0.415	0.822	2.29	1.645	102.6	227.6	6.9	0.534
7.12	13.79	163.2	+/+	37.8	0.9	43.4	0.0	0.603	1.444	305.6	-7.7	14.430	0.486	3.162	167.6	13.6	33.5	97.8	1.015
44200.0	44467.0	0.315	34.6	25.8	3.86	0.959	72.9	0.307	0.904	123.7	425.3	0.627	1.182	1.16	1.284	103.9	243.4	4.5	0.324
44467.0	44602.0	0.324	202.3	12.6	3.95	1.062	75.1	0.311	0.616	139.0	409.6	0.424	0.807	1.83	1.642	101.2	230.9	5.9	0.502
6.69	12.87	75.8	+/+	41.4	0.5	49.9	0.0	0.635	1.444	311.4	-11.4	13.897	0.565	2.860	165.3	14.2	36.6	98.3	1.033
44210.0	44471.1	0.294	44.1	28.6	3.59	0.957	74.1	0.290	0.898	124.8	422.7	0.638	1.159	0.46	1.281	102.8	251.3	1.9	0.302
44471.1	44602.0	0.302	207.0	13.7	3.97	1.059	76.4	0.296	0.613	141.0	405.3	0.431	0.794	1.39	1.640	99.9	234.0	4.7	0.475
6.29	12.08	63.3	+/+	45.4	0.4	56.4	0.0	0.666	1.444	317.4	-15.3	13.445	0.651	2.613	162.5	15.1	39.5	98.7	1.036
44220.0	44475.0	0.274	53.9	30.8	3.30	0.954	75.1	0.275	0.892	126.2	420.3	0.647	1.138	-0.21	1.279	101.9	259.1	-0.9	0.282
44475.0	44602.0	0.282	211.2	14.9	4.04	1.057	77.7	0.283	0.610	143.3	401.2	0.437	0.782	0.94	1.638	98.7	236.9	3.4	0.452
5.92	11.41	124.4	+/+	49.9	0.8	62.7	0.0	0.597	1.444	323.4	-19.0	13.062	0.745	2.410	159.4	16.4	42.2	98.8	1.021
44230.0	44478.9	0.254	63.7	32.4	3.01	0.951	76.2	0.262	0.886	127.9	418.0	0.654	1.118	-0.84	1.277	101.0	266.5	-4.0	0.265
44478.9	44602.0	0.265	215.1	16.4	4.15	1.054	78.9	0.271	0.607	145.8	397.5	0.442	0.772	0.49	1.635	97.7	239.6	1.8	0.432
5.58	10.84	255.5	+/+	54.8	1.9	68.9	0.0	0.727	1.444	329.5	-22.6	12.740	0.844	2.244	156.3	18.1	44.9	98.7	0.991
44240.0	44482.6	0.235	73.5	33.4	2.72	0.948	77.2	0.249	0.881	130.0	415.9	0.661	1.100	-1.41	1.275	100.3	273.7	-7.1	0.250
44482.6	44602.0	0.250	218.4	18.2	4.33	1.052	80.0	0.252	0.605	148.3	394.1	0.446	0.763	0.0	1.633	96.9	242.1	0.1	0.416
5.27	10.37	452.2	+/+	60.1	3.5	74.8	0.0	0.756	1.444	335.6	-26.0	12.471	0.948	2.108	153.3	20.1	47.4	98.3	0.944
44250.0	44486.2	0.216	83.0	33.8	2.44	0.944	78.2	0.238	0.875	132.4	413.9	0.667	1.083	-1.93	1.273	99.6	280.5	-10.2	0.237
44486.2	44602.0	0.237	221.2	20.3	4.55	1.050	81.0	0.254	0.602	150.9	391.0	0.449	0.755	-0.49	1.631	96.1	244.4	-2.0	0.402
4.98	9.98	710.3	+/+	65.8	5.8	80.6	0.0	0.784	1.444	341.7	-29.2	12.249	1.052	1.998	150.4	22.3	49.7	97.7	0.884
44370.0	44490.5	0.247	82.1	-19.5	-10.57	0.926	98.9	0.205	0.890	220.5	389.1	0.708	1.072A	7.68	1.281	94.8	305.1	49.4	0.225
44490.5	44602.0	0.225	224.0	23.3	4.92	1.047	82.2	0.246	0.600	154.3	387.6	0.452	0.747	-1.16	1.629	95.3	246.9	-4.8	0.389
5.47	9.60	373.6	-/+	66.9	3.2	87.4	0.0	0.816	1.444	7.0	18.1	12.036	1.173	1.895	129.9	59.0	52.3	80.9	0.955
44380.0	44496.5	0.246	83.9	-8.8	-8.21	0.931	101.1	0.227	0.902	227.0	395.7	0.698	1.107A	5.06	1.288	96.4	310.1	32.1	0.213
44496.5	44602.0	0.213	226.4	29.1	5.72	1.044	84.0	0.236	0.596	159.6	383.2	0.456	0.737	-2.36	1.626	94.4	250.2	-10.2	0.376
5.44	9.22	300.7	-/+	70.2	2.7	97.1	0.0	0.862	1.444	0.3	1.4	11.840	1.310	1.801	141.5	44.7	56.1	96.8	0.970
ARRIVAL DATE = 2444604.0																			
44170.0	44456.2	0.402	7.0	14.6	4.75	0.963	67.9	0.382	0.923	122.9	437.3	0.570	1.277	3.48	1.291	109.0	219.4	9.9	0.434
44456.2	44604.0	0.434	188.7	10.3	4.47	1.070	68.9	0.393	0.623	134.6	428.0	0.378	0.868	3.17	1.658	107.6	222.5	7.4	0.675
8.47	17.89	808.8	+/+	30.3	3.6	32.8	0.0	0.551	1.441	295.6	-1.2	16.341	0.315	4.336	169.5	11.9	23.3	97.1	0.891
44180.0	44460.2	0.374	16.0	18.6	4.49	0.962	69.6	0.358	0.917	122.9	433.8	0.589	1.245	2.71	1.288	107.4	227.8	8.4	0.398
44460.2	44604.0	0.398	194.3	10.9	4.29	1.066	70.9	0.366	0.620	135.7	422.7	0.393	0.847	2.65	1.656	105.6	225.8	6.7	0.627
7.88	16.48	563.2	+/+	33.2	2.7	39.2	0.0	0.583	1.441	301.7	-4.6	15.514	0.374	3.810	169.0	12.0	26.3	97.5	0.936

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAMI	R A R A LAMZ	DECL DECL ETA	SPEED SPEED PERIC
44190.0	44464.3	0.349	25.2	22.3	4.21	0.960	71.0	0.336	0.910	123.2	430.6	0.605	1.216	1.95	1.286	105.9	236.1	6.6	0.367
44464.3	44604.0	0.367	199.6	11.6	4.17	1.063	72.6	0.344	0.617	137.1	417.6	0.405	0.828	2.15	1.653	103.8	229.0	5.9	0.585
7.36	15.28	385.1	+/+	36.4	2.0	45.7	0.0	0.614	1.441	307.6	-8.2	14.815	0.440	3.386	167.5	12.3	29.2	98.0	0.970
44200.0	44468.4	0.325	34.6	25.5	3.91	0.959	72.3	0.316	0.904	123.8	427.7	0.618	1.190	1.19	1.284	104.7	244.2	4.4	0.339
44468.4	44604.0	0.340	204.6	12.4	4.11	1.060	74.3	0.324	0.613	138.9	412.9	0.415	0.812	1.68	1.651	102.2	232.0	4.9	0.550
6.88	14.24	279.1	+/+	39.9	1.6	52.2	0.0	0.646	1.441	313.6	-11.9	14.224	0.514	3.044	165.2	12.8	31.9	98.4	0.990
44210.0	44472.5	0.303	44.3	28.3	3.61	0.957	73.5	0.299	0.898	124.8	425.0	0.629	1.166	0.47	1.281	103.5	252.2	1.9	0.315
44472.5	44604.0	0.316	209.4	13.4	4.11	1.057	75.7	0.307	0.610	140.9	408.5	0.423	0.798	1.22	1.648	100.8	234.8	3.8	0.519
6.45	13.35	247.1	+/+	43.9	1.5	58.6	0.0	0.677	1.441	319.6	-15.6	13.724	0.595	2.764	162.4	13.7	34.6	98.7	0.996
44220.0	44476.4	0.282	54.1	30.5	3.29	0.954	74.7	0.283	0.892	126.1	422.4	0.639	1.144	-0.22	1.279	102.5	259.9	-0.9	0.294
44476.4	44604.0	0.294	213.7	14.6	4.15	1.054	77.0	0.293	0.608	143.1	404.4	0.429	0.786	0.77	1.646	99.6	237.4	2.5	0.493
6.06	12.59	287.2	+/+	48.3	1.9	64.9	0.0	0.708	1.441	325.6	-19.3	13.302	0.684	2.536	159.3	15.0	37.1	98.8	0.986
44230.0	44480.3	0.261	64.0	32.0	2.98	0.951	75.7	0.268	0.886	127.7	420.0	0.648	1.124	-0.85	1.277	101.6	267.4	-3.9	0.276
44480.3	44604.0	0.276	217.5	16.0	4.24	1.052	78.3	0.281	0.605	145.5	400.7	0.435	0.775	0.31	1.644	98.6	239.9	1.1	0.471
5.70	11.95	395.5	+/+	53.1	2.8	71.1	0.0	0.738	1.441	331.6	-22.8	12.945	0.778	2.349	156.3	16.8	39.5	98.7	0.961
44240.0	44484.0	0.241	73.8	32.9	2.67	0.948	76.8	0.255	0.880	129.7	417.8	0.656	1.105	-1.43	1.275	100.8	274.5	-6.9	0.260
44484.0	44604.0	0.260	220.9	17.7	4.39	1.049	79.4	0.271	0.602	147.9	397.3	0.439	0.765	-0.16	1.642	97.7	242.1	-0.6	0.452
5.36	11.41	566.1	+/+	58.4	4.2	77.0	0.0	0.767	1.441	337.7	-26.0	12.646	0.878	2.196	153.4	18.8	41.8	98.3	0.922
44250.0	44487.6	0.221	83.3	33.2	2.36	0.944	77.8	0.243	0.875	132.2	415.8	0.662	1.087	-1.94	1.273	100.0	281.4	-10.0	0.246
44487.6	44604.0	0.246	223.8	19.6	4.58	1.047	80.5	0.262	0.600	150.5	394.2	0.443	0.757	-0.65	1.640	96.9	244.2	-2.4	0.436
5.06	10.95	794.3	+/+	63.9	6.2	82.7	0.0	0.794	1.441	343.8	-29.0	12.399	0.979	2.072	150.7	21.1	43.9	97.8	0.871
44370.0	44491.0	0.253	82.7	-20.9	-11.13	0.925	98.9	0.204	0.889	220.2	389.5	0.708	1.071A	8.24	1.281	94.9	304.9	51.4	0.234
44491.0	44604.0	0.234	226.1	21.8	4.83	1.045	81.5	0.255	0.598	153.2	391.4	0.446	0.750	-1.16	1.638	96.2	246.1	-4.5	0.423
5.57	10.58	642.8	-/+	66.2	5.3	88.2	0.0	0.820	1.441	10.8	20.1	12.195	1.080	1.972	128.4	60.0	45.9	78.1	0.897
44380.0	44497.1	0.249	84.5	-10.2	-8.66	0.931	101.0	0.226	0.901	226.6	396.2	0.697	1.105A	5.51	1.287	96.4	310.3	34.2	0.218
44497.1	44604.0	0.218	229.0	27.0	5.49	1.042	83.4	0.243	0.594	158.4	386.8	0.450	0.739	-2.26	1.635	95.1	249.1	-9.1	0.406
5.50	10.08	328.1	-/+	68.5	2.9	98.0	0.0	0.867	1.441	3.3	4.7	11.932	1.242	1.845	141.5	45.7	49.4	94.7	0.964

ARRIVAL DATE = 2444606.0

44180.0	44461.8	0.390	15.9	18.4	4.65	0.962	68.6	0.373	0.917	123.3	436.8	0.575	1.258	2.82	1.288	108.5	228.7	8.2	0.421
44461.8	44606.0	0.422	196.6	10.7	4.50	1.064	69.6	0.386	0.617	135.9	426.2	0.379	0.855	2.53	1.667	107.0	227.9	5.9	0.688
8.23	18.27	836.1	+/+	31.7	3.8	41.7	0.0	0.595	1.436	303.8	-4.8	16.053	0.333	4.150	169.2	10.7	22.5	97.9	0.887
44190.0	44465.9	0.363	25.2	22.0	4.32	0.960	70.2	0.349	0.910	123.5	433.4	0.592	1.228	2.01	1.286	106.9	237.0	6.4	0.387
44465.9	44606.0	0.388	202.1	11.3	4.35	1.060	71.6	0.361	0.614	137.2	421.0	0.393	0.836	2.01	1.664	105.0	230.9	5.0	0.641
7.64	16.92	639.2	+/+	34.9	3.2	48.2	0.0	0.626	1.436	309.9	-8.4	15.273	0.394	3.662	167.6	10.9	25.2	98.2	0.922
44200.0	44470.0	0.337	34.7	25.3	3.98	0.958	71.6	0.328	0.904	124.0	430.3	0.607	1.200	1.23	1.284	105.6	245.2	4.3	0.358
44470.0	44606.0	0.358	207.2	12.1	4.26	1.057	73.3	0.339	0.611	138.8	416.2	0.404	0.818	1.52	1.662	103.3	233.7	4.1	0.602
7.12	15.75	513.3	+/+	38.4	2.8	54.7	0.0	0.658	1.436	315.9	-12.1	14.615	0.463	3.269	165.2	11.3	27.8	98.5	0.945
44210.0	44474.0	0.314	44.4	28.0	3.63	0.956	72.9	0.309	0.897	124.9	427.5	0.620	1.175	0.48	1.281	104.3	253.2	1.8	0.332
44474.0	44606.0	0.332	211.9	13.1	4.22	1.054	74.9	0.321	0.608	140.7	411.7	0.413	0.803	1.04	1.659	101.9	236.3	3.0	0.567
6.66	14.75	460.0	+/+	42.3	2.7	61.1	0.0	0.689	1.436	322.0	-15.8	14.058	0.539	2.950	162.4	12.2	30.3	98.7	0.954
44220.0	44477.9	0.291	54.3	30.1	3.28	0.954	74.1	0.292	0.891	126.1	424.8	0.631	1.152	-0.22	1.279	103.2	260.9	-0.9	0.309
44477.9	44606.0	0.309	216.3	14.2	4.24	1.051	76.3	0.306	0.605	142.9	407.5	0.420	0.790	0.58	1.657	100.6	238.7	1.8	0.538
6.23	13.90	477.2	+/+	46.6	3.0	67.3	0.0	0.720	1.436	328.0	-19.4	13.588	0.621	2.690	159.4	13.6	32.6	98.8	0.949
44230.0	44481.8	0.269	64.3	31.6	2.94	0.951	75.2	0.276	0.885	127.6	422.3	0.641	1.130	-0.87	1.277	102.2	268.4	-3.8	0.289
44481.8	44606.0	0.289	220.3	15.4	4.31	1.049	77.6	0.292	0.602	145.1	403.7	0.426	0.778	0.12	1.655	99.5	241.0	0.4	0.513
5.84	13.17	560.0	+/+	51.3	3.7	73.5	0.0	0.750	1.436	334.1	-22.7	13.191	0.711	2.478	156.5	15.4	34.8	98.6	0.930
44240.0	44485.5	0.248	74.2	32.4	2.60	0.947	76.4	0.262	0.880	129.5	420.0	0.649	1.110	-1.45	1.275	101.3	275.5	-6.7	0.271
44485.5	44606.0	0.271	223.7	17.0	4.42	1.046	78.8	0.281	0.600	147.6	400.3	0.431	0.768	-0.34	1.653	98.5	243.0	-1.1	0.492
5.48	12.56	702.5	+/+	56.4	5.0	79.4	0.0	0.778	1.436	340.2	-25.8	12.858	0.805	2.304	153.7	17.5	36.9	98.3	0.898
44250.0	44489.0	0.228	83.7	32.6	2.28	0.943	77.4	0.249	0.874	131.9	417.8	0.656	1.092	-1.96	1.273	100.6	282.4	-9.6	0.256
44489.0	44606.0	0.256	226.6	18.7	4.59	1.044	79.9	0.272	0.597	150.1	397.1	0.435	0.760	-0.82	1.651	97.7	244.9	-2.8	0.474
5.15	12.05	899.2	+/+	61.8	6.8	85.1	0.0	0.805	1.436	346.2	-28.7	12.580	0.903	2.163	151.1	19.8	38.9	97.8	0.854
44380.0	44497.8	0.254	85.2	-12.1	-9.30	0.930	100.9	0.226	0.899	226.0	396.7	0.696	1.103A	6.13	1.287	96.5	310.5	37.1	0.226
44497.8	44606.0	0.227	231.9	24.7	5.29	1.039	82.7	0.253	0.592	157.1	390.2	0.442	0.742	-2.21	1.646	96.0	249.0	-8.2	0.441
5.58	11.08	425.9	-/+	66.7	3.6	99.1	0.0	0.872	1.436	7.1	8.5	12.068	1.153	1.910	140.6	47.1	43.5	91.9	0.943

ARRIVAL DATE = 2444608.0

44190.0	44467.6	0.379	25.1	21.7	4.44	0.960	69.2	0.365	0.910	123.9	436.4	0.578	1.241	2.10	1.286	108.1	238.0	6.2	0.411
44467.6	44608.0	0.411	204.7	10.9	4.50	1.057	70.3	0.381	0.611	137.4	424.4	0.379	0.844	1.85	1.679	106.4	233.2	4.2	0.703
7.99	18.72	925.7	+/+	33.3	4.3	50.9	0.0	0.639	1.429	312.3	-8.4	15.816	0.350	3.999	167.9	9.5	21.6	98.5	0.872
44200.0	44471.6	0.352	34.7	24.9	4.05	0.958	70.7	0.342	0.903	124.2	433.2	0.594	1.212	1.28	1.284	106.6	246.2	4.1	0.379
44471.6	44608.0	0.379	209.9	11.7	4.37	1.054	72.2	0.357	0.608	138.9	419.4	0.391	0.825	1.34	1.676	104.6	235.8	3.3	0.658
7.41	17.42	779.2	+/+	36.7	4.0	57.3	0.0	0.671	1.429	318.5	-12.2	15.079	0.413	3.544	165.4	9.8	24.1	98.7	0.897
44210.0	44475.6	0.326	44.6	27.6	3.66	0.956	72.1	0.321	0.897	125.0	430.2	0.609	1.185	0.50	1.281	105.3	254.2	1.8	0.350
44475.6	44608.0	0.350	214.7	12.5	4.31	1.051	73.9	0.337	0.605	140.6	414.8	0.401	0.809	0.85	1.674	103.0	238.3	2.2	0.620
6.90	16.30	703.7	+/+	40.6	3.9	63.7	0.0	0.702	1.429	324.6	-15.8	14.455	0.483	3.176	162.6	10.7	26.4	98.8	0.909
44220.0	44479.6	0.302	54.6	29.7	3.27	0.953	73.4	0.303	0.891	126.0	427.4	0.621	1.160	-0.23	1.279	104.1	262.0	-0.9	0.325
44479.6	44608.0	0.325	219.2	13.5	4.30	1.048	75.4	0.320	0.602	142.7	410.6	0.409	0.795	0.38	1.671	101.6	240.6	1.1	0.587
6.43	15.34	696.2	+/+	44.8	4.1	70.0	0.0	0.733	1.429	330.7	-19.3	13.929	0.559	2.877	159.7	12.0	28.6	98.7	0.909
44230.0	44483.4	0.278	64.6	31.1	2.89	0.950	74.6	0.286	0.885	127.5	424.8	0.632	1.138	-0.89	1.277	103.0	269.5	-3.6	0.304
44483.4	44608.0	0.304	223.2	14.7	4.34	1.045	76.8	0.306	0.599	144.9	406.7	0.416	0.783	-0.08	1.669	100.4	242.7	-0.2	0.559
6.00	14.52	751.7	+/+	49.4	4.8	76.1	0.0	0.762	1.429	336.8	-22.6	13.485	0.643	2.634	156.8	13.9	30.7	98.6	0.896

1980
EARTH-VENUS-MERCURY

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44240.0	44487.1	0.256	74.6	31.8	2.53	0.947	75.8	0.270	0.879	129.3	422.4	0.641	1.117	-1.48	1.275	102.0	276.7	-6.5	0.284
44487.1	44608.0	0.285	226.7	16.1	4.43	1.042	78.1	0.294	0.597	147.2	403.2	0.421	0.772	-0.54	1.667	99.4	244.6	-1.7	0.536
5.62	13.83	864.4	+/+	54.3	5.8	82.0	0.0	0.791	1.429	342.9	-25.5	13.111	0.732	2.435	154.1	16.0	32.6	98.2	0.871
44380.0	44498.5	0.261	86.1	-14.5	-10.12	0.929	100.8	0.226	0.898	225.5	397.3	0.695	1.100A	6.95	1.286	96.6	310.5	40.6	0.238
44498.5	44608.0	0.238	234.8	22.4	5.08	1.035	81.9	0.265	0.589	155.8	393.6	0.433	0.745	-2.18	1.660	96.8	249.7	-7.5	0.480
5.71	12.23	636.6	-/+	65.1	5.2	100.2	0.0	0.877	1.429	11.9	12.8	12.257	1.047	2.002	138.6	49.0	38.3	88.3	0.900
ARRIVAL DATE = 2444610.0																			
44210.0	44477.4	0.341	44.7	27.2	3.69	0.956	71.2	0.335	0.896	125.1	433.2	0.596	1.197	0.52	1.281	106.3	255.3	1.7	0.372
44477.4	44610.0	0.372	217.6	11.8	4.37	1.047	72.7	0.356	0.602	140.6	418.1	0.388	0.816	0.65	1.691	104.3	240.8	1.6	0.678
7.19	17.99	979.8	+/+	38.7	5.1	66.5	0.0	0.716	1.419	327.3	-15.6	14.926	0.428	3.452	163.1	9.0	22.8	98.8	0.863
44270.0	44481.3	0.314	54.8	29.2	3.26	0.953	72.6	0.315	0.890	126.1	430.3	0.610	1.171	-0.23	1.279	105.0	263.2	-0.8	0.345
44481.3	44610.0	0.345	222.2	12.7	4.33	1.044	74.3	0.337	0.599	142.5	413.7	0.397	0.801	0.17	1.689	102.8	243.0	0.4	0.641
6.67	16.91	946.5	+/+	42.9	5.3	72.8	0.0	0.746	1.419	333.5	-19.0	14.333	0.499	3.106	160.1	10.4	25.0	98.7	0.866
44230.0	44485.2	0.290	64.9	30.6	2.84	0.950	73.9	0.297	0.884	127.4	427.5	0.622	1.147	-0.91	1.277	103.8	270.7	-3.5	0.321
44485.2	44610.0	0.321	226.3	13.8	4.35	1.041	75.8	0.322	0.596	144.6	409.7	0.404	0.788	-0.29	1.686	101.5	245.0	-0.8	0.610
6.21	15.99	973.6	+/+	47.3	5.8	78.9	0.0	0.776	1.419	339.7	-22.2	13.833	0.576	2.824	157.3	12.3	26.9	98.5	0.859

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL LEG	DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
									ARRIVAL DATE = 2445270.0										
44780.0	45066.5	0.541	248.6	-24.3	-1.60	0.930	57.2	0.552	0.906	133.5	463.7	0.406	1.406	1.91	1.286	121.7	105.0	3.1	0.674
45066.5	45270.0	0.674	96.1	-5.0	-3.39	1.189	56.7	0.550	0.744	121.1	392.9	0.335	1.153	2.59	2.071	101.6	152.3	15.8	0.336
11.73	8.11		+/+	12.1	0.0	291.8	0.0	0.724	1.215	189.7	42.3	22.296	0.131	9.516	137.7	7.4	75.3	98.9	1.111
44790.0	45071.7	0.521	259.2	-24.0	-0.61	0.924	58.5	0.534	0.899	133.6	462.5	0.418	1.379	2.86	1.282	120.5	113.9	4.9	0.650
45071.7	45270.0	0.650	104.5	-5.3	-3.41	1.183	57.8	0.534	0.737	120.8	384.4	0.344	1.131	3.08	2.068	98.4	172.2	18.5	0.347
11.24	8.41	85.4	+/+	13.8	0.3	300.0	0.0	0.764	1.215	199.1	47.3	21.801	0.140	8.498	132.7	7.8	94.4	97.3	1.028
44800.0	45077.0	0.505	269.5	-22.9	0.34	0.920	59.7	0.520	0.891	133.8	461.5	0.428	1.355	3.68	1.277	119.6	122.7	6.5	0.632
45077.0	45270.0	0.632	112.9	-5.6	-3.51	1.177	58.6	0.520	0.730	120.8	376.1	0.350	1.111	3.59	2.065	95.5	189.1	19.6	0.384
10.84	9.46	424.7	+/+	15.5	1.3	308.4	0.0	0.806	1.215	209.4	51.0	21.314	0.148	8.079	128.9	8.6	110.2	95.7	0.951
44810.0	45082.4	0.492	279.5	-21.1	1.26	0.915	60.6	0.507	0.884	134.2	461.0	0.436	1.333	4.38	1.273	118.9	131.5	7.9	0.618
45082.4	45270.0	0.618	121.3	-6.0	-3.69	1.170	59.3	0.510	0.723	121.2	367.8	0.354	1.092	4.17	2.062	92.6	202.3	20.0	0.439
10.53	11.02	791.9	+/+	17.3	2.5	317.0	0.0	0.848	1.215	219.8	53.9	20.947	0.155	7.769	126.0	9.6	122.4	94.2	0.879
44900.0	45139.5	0.506	356.7	9.6	6.55	0.885	61.3	0.517	0.816	140.6	470.1	0.394	1.237	4.94	1.235	120.6	217.5	8.1	0.650
45139.5	45270.0	0.650	201.8	11.7	8.36	1.069	57.9	0.551	0.621	137.3	293.3	0.279D	0.963	-4.94	2.006	67.4	250.8	-8.2	1.119
10.88	31.00	792.9	+/-	15.9	2.3	47.3	0.0	1.263	1.215	298.5	-13.0	21.797	0.140	8.495	163.7	12.8	169.4	108.3	0.875
									ARRIVAL DATE = 2445272.0										
44780.0	45066.6	0.544	248.5	-24.3	-1.59	0.929	57.0	0.554	0.906	133.6	464.0	0.404	1.408	1.92	1.286	121.8	105.1	3.1	0.677
45066.6	45272.0	0.677	96.2	-4.3	-2.97	1.189	56.5	0.553	0.744	121.3	402.1	0.333	1.156	2.65	2.028	104.7	145.8	14.6	0.359
11.79	8.76		+/+	11.6	0.0	291.9	0.0	0.725	1.253	190.1	40.2	22.308	0.129	9.923	139.8	7.5	60.1	99.0	1.153
44790.0	45071.6	0.519	259.2	-24.0	-0.62	0.924	58.6	0.533	0.899	133.5	462.3	0.420	1.378	2.85	1.282	120.4	113.8	4.9	0.648
45071.6	45272.0	0.648	104.5	-4.5	-2.92	1.184	57.8	0.532	0.738	120.6	393.5	0.345	1.131	3.06	2.025	101.5	164.9	17.9	0.344
11.19	8.34		+/+	13.2	0.0	299.8	0.0	0.764	1.253	199.3	45.3	21.663	0.141	8.696	134.7	7.7	78.7	97.4	1.086
44800.0	45076.7	0.499	269.6	-23.0	0.29	0.920	60.0	0.514	0.892	133.6	460.9	0.433	1.350	3.63	1.277	119.2	122.5	6.5	0.624
45076.7	45272.0	0.625	112.8	-4.7	-2.93	1.178	59.0	0.515	0.732	120.3	385.2	0.355	1.109	3.47	2.023	98.5	183.3	19.7	0.359
10.70	8.74	112.8	+/+	14.9	0.3	307.9	0.0	0.804	1.253	208.9	49.1	21.119	0.152	7.913	130.9	8.4	96.1	95.9	1.022
44810.0	45081.9	0.482	279.7	-21.2	1.15	0.915	61.2	0.499	0.884	133.9	460.0	0.443	1.325	4.29	1.273	118.3	131.3	8.0	0.606
45081.9	45272.0	0.606	121.1	-5.0	-3.00	1.172	59.9	0.502	0.725	120.4	376.9	0.361	1.089	3.90	2.019	95.6	198.8	20.3	0.395
10.31	9.78	369.9	+/+	16.5	1.2	316.3	0.0	0.845	1.253	219.0	51.9	20.632	0.161	7.507	128.0	9.4	110.6	94.5	0.964
44820.0	45087.3	0.469	289.3	-18.8	1.98	0.911	62.2	0.486	0.877	134.4	459.4	0.450	1.303	4.82	1.269	117.5	140.1	9.2	0.591
45087.3	45272.0	0.591	129.4	-5.4	-3.14	1.165	60.6	0.491	0.718	120.8	368.8	0.365	1.071	4.39	2.016	92.9	211.1	20.2	0.446
10.00	11.24	638.2	+/+	18.0	2.1	324.8	0.0	0.887	1.253	229.1	54.0	20.258	0.169	7.201	125.9	10.3	121.9	93.3	0.911
44830.0	45092.9	0.459	298.5	-15.9	2.76	0.908	63.1	0.476	0.869	134.9	459.2	0.455	1.283	5.23	1.264	117.0	149.0	10.2	0.581
45092.9	45272.0	0.581	137.9	-5.9	-3.39	1.158	61.1	0.484	0.710	121.5	360.6	0.366	1.054	4.95	2.012	90.2	220.6	20.0	0.507
9.77	12.99	925.3	+/+	19.5	3.1	333.7	0.0	0.930	1.253	239.2	55.5	19.985	0.176	6.982	124.3	11.2	130.6	92.5	0.859
44910.0	45144.5	0.475	5.4	13.1	5.95	0.882	63.3	0.493	0.808	141.0	468.6	0.410	1.207	3.86	1.232	119.0	226.3	6.8	0.616
45144.5	45272.0	0.616	209.9	11.3	7.57	1.066	59.7	0.527	0.618	137.0	294.3	0.292D	0.944	-3.78	1.959	68.5	258.3	-6.4	1.075
10.13	29.70	619.3	+/-	16.8	1.9	55.3	0.0	1.295	1.253	306.5	-15.8	20.886	0.156	7.718	161.8	11.3	169.4	108.1	0.912
44920.0	45151.1	0.475	14.4	16.1	5.53	0.878	63.2	0.497	0.801	141.9	469.9	0.403	1.199	2.97	1.228	119.4	236.2	5.1	0.621
45151.1	45272.0	0.621	218.8	7.7	5.34	1.048	58.9	0.545	0.603	139.7	286.6	0.274D	0.931	-1.27	1.949	65.7	261.1	-2.0	1.146
10.14	31.80	885.7	+/-	17.4	2.7	65.8	0.0	1.335	1.253	317.9	-8.7	21.029	0.154	7.838	169.2	10.9	174.0	107.7	0.861
									ARRIVAL DATE = 2445274.0										
44780.0	45066.9	0.550	248.4	-24.2	-1.56	0.929	56.6	0.559	0.906	133.8	464.6	0.399	1.413	1.95	1.286	122.2	105.2	3.1	0.685
45066.9	45274.0	0.685	96.4	-3.7	-2.54	1.189	56.0	0.559	0.744	121.8	410.8	0.328	1.161	2.78	1.986	107.8	141.4	13.3	0.399
11.93	9.89		+/+	11.0	0.0	292.4	0.0	0.727	1.287	190.6	37.7	22.463	0.126	10.389	142.3	7.8	47.4	99.3	1.186
44790.0	45071.7	0.521	259.2	-24.0	-0.61	0.924	58.5	0.534	0.899	133.6	462.4	0.419	1.379	2.86	1.282	120.5	113.8	4.9	0.650
45071.7	45274.0	0.650	104.6	-3.8	-2.45	1.184	57.7	0.534	0.739	120.7	402.2	0.344	1.134	3.12	1.984	104.4	158.4	16.8	0.362
11.23	8.83		+/+	12.6	0.0	300.0	0.0	0.764	1.287	199.7	43.1	21.623	0.140	9.091	136.9	7.8	64.2	97.4	1.134
44800.0	45076.6	0.497	269.7	-23.0	0.26	0.920	60.1	0.512	0.892	133.6	460.7	0.435	1.348	3.61	1.277	119.1	122.5	6.5	0.621
45076.6	45274.0	0.622	112.7	-3.9	-2.40	1.179	59.1	0.514	0.733	120.0	393.7	0.357	1.109	3.45	1.981	101.3	176.5	19.4	0.353
10.65	8.58		+/+	14.2	0.0	307.7	0.0	0.803	1.287	209.0	47.1	20.965	0.153	8.074	132.9	8.4	81.5	95.9	1.085
44810.0	45081.6	0.477	279.8	-21.3	1.09	0.915	61.6	0.494	0.884	133.8	459.3	0.448	1.321	4.23	1.273	117.9	131.1	8.0	0.598
45081.6	45274.0	0.598	120.9	-4.1	-2.40	1.173	60.2	0.497	0.727	119.8	385.5	0.366	1.088	3.79	1.978	98.4	193.4	20.5	0.369
10.17	9.04	39.7	+/+	15.8	0.1	315.8	0.0	0.842	1.287	218.4	50.0	20.433	0.166	7.344	129.9	9.2	97.4	94.7	1.040
44820.0	45086.8	0.460	289.4	-18.9	1.86	0.912	62.8	0.478	0.877	134.2	458.4	0.458	1.296	4.72	1.269	117.0	139.8	9.2	0.579
45086.8	45274.0	0.580	129.1	-4.3	-2.46	1.167	61.1	0.483	0.720	119.9	377.3	0.373	1.068	4.14	1.975	95.6	207.6	20.6	0.404
9.79	10.03	210.0	+/+	17.2	0.7	324.0	0.0	0.883	1.287	228.2	52.0	19.950	0.176	6.954	127.8	10.2	110.7	93.6	1.001
44830.0	45092.2	0.447	298.6	-16.0	2.59	0.908	63.8	0.465	0.870	134.7	457.8	0.465	1.274	5.09	1.264	116.2	148.5	10.3	0.565
45092.2	45274.0	0.565	137.4	-4.7	-2.57	1.160	61.9	0.472	0.713	120.3	369.2	0.377	1.050	4.53	1.972	93.0	219.1	20.2	0.451
9.49	11.38	378.8	+/+	18.6	1.3	332.5	0.0	0.924	1.287	237.8	53.4	19.576	0.186	6.658	126.4	11.0	121.3	92.8	0.965
44840.0	45097.8	0.437	307.4	-12.7	3.27	0.905	64.7	0.455	0.862	135.4	457.7	0.470	1.254	5.33	1.260	115.6	157.4	11.0	0.554
45097.8	45274.0	0.554	145.9	-5.1	-2.77	1.153	62.4	0.464	0.706	121.1	361.2	0.378	1.033	4.99	1.968	90.4	228.2	19.7	0.506
9.26	12.98	553.5	+/+	19.8	1.9	341.4	0.0	0.967	1.287	247.4	54.4	19.298	0.193	6.443	125.4	11.7	129.7	92.3	0.930
44850.0	45103.5	0.430	315.9	-9.0	3.89	0.901	65.4	0.447	0.855	136.1	457.8	0.472	1.237	5.45	1.256	115.3	166.5	11.4	0.547
45103.5	45274.0	0.547	154.4	-5.8	-3.09	1.146	62.8	0.459	0.697	122.1	353.1	0.377D	1.018	5.55	1.964	87.8	235.6	19.5	0.567
9.10	14.76	753.3	+/+	20.9	2.7	350.5	0.0	1.010	1.287	256.8	54.9	19.113	0.198	6.301	124.8	12.1	136.3	92.1	0.893
44920.0	45149.3	0.442	14.0	16.4	5.28	0.879	65.4	0.468	0.801	141.8	467.1	0.426	1.176	2.76	1.228	117.4	234.8	5.2	0.581
45149.3	45274.0	0.581	217.7	10.5	6.49	1.064	61.4	0.504	0.615	136.8	295.1	0.305D	0.925	-2.42	1.914	69.4	265.4	-4.2	1.029
9.37	28.33	380.6	+/-	17.7	1.3	63.0	0.0	1.325	1.287	314.5	-17.3	19.986	0.176	6.983	160.9	9.7	169.1	107.7	0.963
44930.0	45155.9	0.441	23.3	18.9	4.74	0.875	65.3	0.473	0.794	142.7	468.4	0.419	1.169	1.81	1.225	117.8	244.7	3.4	0.587
45155.9	45274.0	0.587	226.6	7.0	4.50	1.046	60.7	0.521	0.600	139.6	287.4	0.287D	0.913	-0.20	1.904	66.7	268.2	-0.3	1.098
9.35	30.37	666.2	+/-	18.4	2.2	73.6	0.0	1.364	1.287	325.7	-11.6	20.139	0.172	7.106	167.3	9.5	172.8	107.5	0.906

DEPART PASS OV1	PASS ARRIVE OV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COIST1	SMA SMA COIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
								ARRIVAL DATE = 2445276.0											
44780.0	45067.3	0.559	248.2	-24.0	-1.51	0.929	56.0	0.568	0.906	134.2	465.7	0.392	1.420	1.99	1.286	122.8	105.4	3.1	0.697
45067.3	45276.0	0.697	96.7	-2.9	-2.08	1.189	55.4	0.569	0.744	122.5	419.1	0.321	1.167	2.98	1.947	110.7	139.0	12.1	0.451
12.16	11.39		+/+	10.5	0.0	293.0	0.0	0.730	1.318	191.1	34.9	22.764	0.122	10.937	145.1	8.2	37.2	99.7	1.210
44790.0	45071.9	0.526	259.1	-23.9	-0.58	0.924	58.2	0.539	0.899	133.7	463.0	0.415	1.383	2.89	1.282	120.8	114.0	4.8	0.656
45071.9	45276.0	0.657	104.8	-3.0	-1.97	1.184	57.4	0.540	0.739	121.0	410.3	0.340	1.138	3.26	1.944	107.2	153.6	15.5	0.396
11.35	9.79		+/+	12.0	0.0	300.3	0.0	0.766	1.318	200.2	40.7	21.722	0.137	9.546	139.3	8.0	51.7	97.7	1.174
44800.0	45076.6	0.498	269.6	-23.0	0.27	0.920	60.1	0.513	0.892	133.6	460.8	0.434	1.349	3.62	1.277	119.2	122.5	6.5	0.623
45076.6	45276.0	0.623	112.9	-3.1	-1.90	1.179	59.0	0.515	0.734	120.0	401.8	0.356	1.111	3.52	1.942	103.9	170.0	18.4	0.366
10.67	8.95		+/+	13.6	0.0	307.8	0.0	0.803	1.318	209.4	45.0	20.887	0.153	8.458	135.0	8.4	67.7	96.0	1.139
44810.0	45081.5	0.474	279.8	-21.3	1.06	0.915	61.7	0.492	0.884	133.7	459.0	0.450	1.319	4.21	1.273	117.7	131.0	8.0	0.595
45081.5	45276.0	0.595	120.9	-3.2	-1.87	1.174	60.4	0.494	0.728	119.5	393.5	0.368	1.088	3.78	1.939	100.9	186.9	20.3	0.362
10.12	8.83		+/+	15.1	0.0	315.5	0.0	0.841	1.318	218.6	48.0	20.216	0.167	7.618	131.9	9.2	83.7	94.6	1.108
44820.0	45086.5	0.455	289.5	-19.0	1.79	0.912	63.1	0.473	0.877	134.1	457.7	0.462	1.292	4.66	1.269	116.6	139.6	9.3	0.572
45086.5	45276.0	0.572	128.9	-3.4	-1.87	1.168	61.5	0.477	0.722	119.3	385.4	0.377	1.067	4.04	1.936	98.1	202.4	20.9	0.378
9.66	9.29		+/+	16.5	0.0	323.5	0.0	0.880	1.318	227.8	50.1	19.681	0.181	6.978	129.8	10.1	98.2	93.6	1.082
44830.0	45091.6	0.438	298.7	-16.1	2.46	0.908	64.4	0.457	0.870	134.6	456.8	0.472	1.267	4.99	1.264	115.6	148.2	10.3	0.553
45091.6	45276.0	0.554	137.1	-3.5	-1.91	1.162	62.4	0.463	0.716	119.4	377.4	0.384	1.047	4.31	1.933	95.5	215.6	20.7	0.410
9.29	10.20		+/+	17.7	0.0	331.7	0.0	0.920	1.318	236.9	51.4	19.255	0.193	6.487	128.4	10.9	110.5	93.0	1.061
44840.0	45097.0	0.425	307.6	-12.8	3.09	0.905	65.4	0.444	0.862	135.2	456.3	0.479	1.246	5.19	1.260	114.9	156.9	11.1	0.539
45097.0	45276.0	0.539	145.3	-3.8	-1.99	1.156	63.1	0.453	0.709	119.9	369.4	0.388	1.030	4.61	1.930	92.9	226.4	20.0	0.453
8.99	11.43	27.1	+/+	18.8	0.1	340.2	0.0	0.961	1.318	245.9	52.2	18.914	0.204	6.150	127.5	11.5	120.6	92.6	1.044
44850.0	45102.6	0.415	316.0	-9.1	3.66	0.902	66.3	0.434	0.855	136.0	456.2	0.484	1.226	5.28	1.256	114.4	165.8	11.5	0.528
45102.6	45276.0	0.528	153.7	-4.2	-2.14	1.149	63.7	0.445	0.701	120.7	361.3	0.390	1.013	4.96	1.926	90.4	235.1	19.3	0.503
8.77	12.88	97.3	+/+	19.7	0.4	349.0	0.0	1.003	1.318	254.8	52.5	18.638	0.212	5.942	127.2	11.9	128.7	92.5	1.028
44860.0	45108.4	0.408	324.1	-5.3	4.18	0.899	67.0	0.427	0.848	136.8	456.4	0.486	1.209	5.24	1.252	114.0	174.8	11.6	0.520
45108.4	45276.0	0.520	162.3	-4.7	-2.38	1.142	64.1	0.439	0.693	121.8	353.3	0.389D	0.998	5.39	1.921	88.0	242.3	18.9	0.558
8.60	14.49	180.4	+/+	20.5	0.7	358.1	0.0	1.046	1.318	263.6	52.5	18.446	0.219	5.800	127.3	12.0	135.3	92.8	1.009
44870.0	45114.3	0.402	332.1	-1.3	4.61	0.896	67.6	0.422	0.840	137.6	457.0	0.486	1.195	5.08	1.248	113.8	184.1	11.3	0.516
45114.3	45276.0	0.516	170.9	-5.5	-2.78	1.134	64.3	0.437	0.685	123.2	345.2	0.386D	0.984	5.98	1.917	85.5	248.4	18.8	0.618
8.49	16.23	307.2	+/+	21.3	1.1	7.6	0.0	1.090	1.318	272.2	52.2	18.333	0.223	5.717	127.5	11.8	140.7	93.3	0.982
44880.0	45120.6	0.400	340.0	2.7	4.97	0.893	67.9	0.420	0.833	138.5	458.0	0.483	1.183	4.82	1.244	113.8	193.5	10.7	0.515
45120.6	45276.0	0.515	179.9	-6.9	-3.50	1.125	64.5	0.437	0.675	124.8	337.0	0.380D	0.970	6.88	1.911	83.1	253.8	19.4	0.684
8.44	18.15	557.1	+/+	22.3	2.1	17.5	0.0	1.135	1.318	280.8	52.4	18.320	0.223	5.708	127.5	11.4	144.9	94.1	0.932
44920.0	45148.2	0.422	13.7	16.6	5.13	0.879	66.7	0.450	0.802	141.9	465.3	0.441	1.163	2.64	1.228	116.2	233.8	5.2	0.557
45148.2	45276.0	0.557	216.7	16.0	9.16	1.076	63.5	0.469	0.625	134.3	302.6	0.332D	0.919	-5.06	1.880	72.5	269.6	-9.7	0.935
8.91	25.56	641.1	+/-	19.9	2.2	61.2	0.0	1.318	1.318	309.9	-32.4	19.366	0.191	6.495	145.7	9.0	163.0	107.9	0.913
44930.0	45154.0	0.408	22.6	19.3	4.58	0.876	67.6	0.443	0.795	142.9	465.6	0.443	1.147	1.68	1.225	115.8	243.0	3.4	0.547
45154.0	45276.0	0.547	225.2	9.0	5.21	1.062	63.1	0.481	0.613	136.7	295.7	0.318D	0.908	-0.95	1.872	70.3	271.9	-1.7	0.981
8.60	26.92	78.6	+/-	18.5	0.3	70.5	0.0	1.353	1.318	322.3	-17.7	19.120	0.198	6.306	161.2	8.2	168.2	107.3	1.032
44940.0	45160.6	0.406	32.1	21.3	3.95	0.871	67.5	0.448	0.787	143.9	467.0	0.435	1.140	0.73	1.221	116.2	252.8	1.4	0.554
45160.6	45276.0	0.554	234.0	6.0	3.56	1.044	62.5	0.499	0.598	139.5	288.0	0.300D	0.896	0.87	1.861	67.7	274.9	1.4	1.048
8.57	28.89	414.5	+/-	19.3	1.4	81.1	0.0	1.391	1.318	333.3	-13.6	19.294	0.193	6.439	165.9	8.3	171.2	107.3	0.958
								ARRIVAL DATE = 2445278.0											
44780.0	45067.8	0.572	248.0	-23.9	-1.45	0.929	55.2	0.579	0.906	134.7	467.0	0.381	1.431	2.04	1.286	123.7	105.5	3.1	0.715
45067.8	45278.0	0.715	97.1	-2.1	-1.58	1.189	54.4	0.582	0.744	123.6	426.9	0.311	1.176	3.25	1.910	113.6	138.2	11.2	0.513
12.48	13.17		+/+	9.9	0.0	293.9	0.0	0.734	1.344	191.6	31.7	23.212	0.116	11.577	148.3	8.9	29.0	100.4	1.226
44790.0	45072.3	0.534	258.9	-23.8	-0.52	0.924	57.7	0.546	0.899	134.0	463.9	0.408	1.389	2.94	1.282	121.4	114.1	4.8	0.667
45072.3	45278.0	0.667	105.1	-2.2	-1.48	1.184	56.8	0.548	0.739	121.7	418.0	0.334	1.144	3.47	1.908	109.8	150.6	14.2	0.442
11.54	11.13		+/+	11.4	0.0	300.9	0.0	0.769	1.344	200.7	38.0	21.959	0.133	10.075	141.9	8.3	41.4	98.1	1.207
44800.0	45076.8	0.502	269.6	-22.9	0.31	0.920	59.8	0.517	0.891	133.7	461.2	0.431	1.352	3.65	1.277	119.4	122.6	6.5	0.628
45076.8	45278.0	0.628	113.1	-2.2	-1.40	1.179	58.7	0.519	0.734	120.3	409.4	0.353	1.115	3.67	1.905	106.4	164.9	17.2	0.395
10.77	9.78		+/+	12.9	0.0	308.1	0.0	0.805	1.344	209.8	42.6	20.942	0.150	8.895	137.3	8.5	55.5	96.2	1.185
44810.0	45081.5	0.475	279.8	-21.3	1.06	0.915	61.7	0.492	0.884	133.7	459.1	0.449	1.319	4.21	1.273	117.8	131.0	8.0	0.595
45081.5	45278.0	0.595	121.0	-2.3	-1.35	1.174	60.3	0.495	0.729	119.4	401.1	0.368	1.089	3.85	1.903	103.3	180.5	19.6	0.371
10.13	9.10		+/+	14.4	0.0	315.6	0.0	0.841	1.344	218.9	45.8	20.112	0.167	7.989	134.1	9.2	70.5	94.6	1.168
44820.0	45086.3	0.452	289.5	-19.0	1.75	0.912	63.3	0.470	0.877	134.0	457.4	0.464	1.290	4.64	1.269	116.4	139.5	9.3	0.568
45086.3	45278.0	0.568	128.9	-2.4	-1.33	1.169	61.7	0.475	0.723	118.9	393.0	0.380	1.066	4.03	1.900	100.5	196.2	20.8	0.369
9.60	9.04		+/+	15.7	0.0	323.2	0.0	0.879	1.344	228.0	48.0	19.431	0.183	7.301	131.8	10.0	85.2	93.5	1.155
44830.0	45091.3	0.433	298.8	-16.2	2.38	0.908	64.7	0.452	0.870	134.5	456.2	0.477	1.263	4.93	1.265	115.3	147.9	10.4	0.546
45091.3	45278.0	0.546	136.9	-2.5	-1.33	1.164	62.8	0.458	0.717	118.8	385.0	0.389	1.046	4.21	1.897	97.8	210.6	21.0	0.385
9.16	9.49		+/+	16.9	0.0	331.1	0.0	0.917	1.344	237.0	49.4	18.872	0.199	6.786	130.4	10.8	98.7	92.7	1.149
44840.0	45096.5	0.417	307.6	-12.9	2.97	0.905	66.0	0.437	0.863	135.1	455.4	0.486	1.239	5.10	1.260	114.4	156.5	11.1	0.528
45096.5	45278.0	0.528	144.9	-2.7	-1.35	1.158	63.7	0.444	0.711	119.1	377.0	0.395	1.027	4.41	1.894	95.2	222.8	20.5	0.414
8.81	10.31		+/+	18.0	0.0	339.3	0.0	0.957	1.344	245.8	50.1	18.413	0.212	6.405	129.6	11.5	110.1	92.2	1.148
44850.0	45101.8	0.404	316.0	-9.2	3.50	0.902	67.0	0.424	0.855	135.9	454.9	0.493	1.218	5.15	1.256	113.7	165.2	11.6	0.514
45101.8	45278.0	0.514	153.1	-2.9	-1.41	1.152	64.4	0.434	0.705	119.6	369.1	0.399	1.010	4.62	1.890	92.8	233.0	19.7	0.452
8.52	11.41		+/+	18.8	0.0	347.8	0.0	0.997	1.344	254.4	50.2	18.043	0.224	6.130	129.5	11.9	119.7	92.1	1.151
44860.0	45107.4	0.394	324.2	-5.4	3.97	0.899	67.9	0.414	0.848	136.8	454.9	0.497	1.199	5.08	1.252	113.2	174.1	11.7	0.503
45107.4	45278.0	0.503	161.5	-3.1	-1.52	1.146	64.9	0.426	0.697	120.5	361.2	0.401	0.994	4.87	1.886	90.3	241.4	18.8	0.497
8.30	12.71		+/+	19.4	0.0	356.6	0.0	1.039	1.344	262.8	49.8	17.756	0.234	5.938	129.9	12.0	127.6	92.4	1.156

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44870.0	45113.2	0.386	332.1	-1.4	4.37	0.896	68.6	0.407	0.841	137.7	455.2	0.499	1.183	4.90	1.248	112.8	183.1	11.4	0.495
45113.2	45278.0	0.495	170.0	-3.5	-1.69	1.139	65.3	0.420	0.690	121.6	353.2	0.400D	0.979	5.18	1.882	88.0	248.4	18.1	0.547
8.13	14.15		+/+	19.8	0.0	5.7	0.0	1.081	1.344	271.1	49.0	17.551	0.242	5.803	130.7	11.7	134.2	93.0	1.160
44880.0	45119.2	0.380	339.9	2.7	4.69	0.894	69.2	0.402	0.833	138.7	455.8	0.498	1.169	4.61	1.244	112.6	192.3	10.8	0.490
45119.2	45278.0	0.490	178.7	-4.1	-1.97	1.131	65.6	0.418	0.681	123.0	345.1	0.397D	0.966	5.59	1.877	85.6	254.4	17.7	0.600
8.01	15.71		+/+	20.2	0.0	15.2	0.0	1.124	1.344	279.2	47.9	17.439	0.246	5.695	131.9	11.2	139.7	94.0	1.157
44890.0	45125.4	0.376	347.7	6.6	4.91	0.891	69.5	0.400	0.826	139.6	456.7	0.495	1.156	4.21	1.240	112.6	201.8	9.9	0.489
45125.4	45278.0	0.489	187.5	-5.2	-2.48	1.122	65.8	0.418	0.672	124.7	337.0	0.391D	0.952	6.22	1.872	83.3	259.7	17.8	0.658
7.93	17.41		+/+	20.7	0.0	25.0	0.0	1.168	1.344	287.1	46.9	17.456	0.248	5.563	133.0	10.4	144.2	95.4	1.132
44900.0	45131.9	0.375	355.7	10.4	5.03	0.888	69.7	0.401	0.818	140.6	458.0	0.490	1.147	3.71	1.236	112.8	211.4	8.6	0.491
45131.9	45278.0	0.491	196.5	-7.3	-3.53	1.113	65.8	0.420	0.661	126.7	328.7	0.383D	0.939	7.40	1.866	80.9	264.6	19.2	0.723
7.91	19.32		+/+	21.8	0.0	35.3	0.0	1.212	1.344	294.7	47.2	17.712	0.246	5.289	132.8	9.4	147.6	97.2	1.053
44930.0	45152.5	0.384	22.0	19.5	4.46	0.876	69.1	0.422	0.795	143.2	463.5	0.460	1.131	1.60	1.225	114.5	241.6	3.4	0.519
45152.5	45278.0	0.519	224.0	13.3	7.02	1.075	65.0	0.447	0.624	134.2	303.3	0.345D	0.903	-2.77	1.841	73.3	275.3	-5.6	0.882
8.09	23.98	12.9	+/-	20.0	0.0	68.1	0.0	1.344	1.344	318.2	-29.3	18.414	0.220	5.776	149.3	7.3	163.1	107.3	1.047
44940.0	45158.5	0.373	31.1	21.7	3.88	0.872	69.8	0.418	0.788	144.5	464.2	0.458	1.118	0.68	1.222	114.3	250.8	1.5	0.515
45158.5	45278.0	0.515	232.4	7.1	3.80	1.061	64.6	0.460	0.611	136.7	296.3	0.330D	0.892	0.56	1.832	71.1	278.1	1.0	0.933
7.85	25.51		+/-	19.2	0.0	77.6	0.0	1.379	1.344	330.3	-17.1	18.144	0.223	5.999	162.4	7.0	166.8	106.5	1.117
44950.0	45165.1	0.371	40.8	23.2	3.20	0.866	69.8	0.424	0.781	145.5	465.7	0.450	1.112	-0.25	1.218	114.7	260.6	-0.5	0.522
45165.1	45278.0	0.523	241.1	4.6	2.57	1.043	64.1	0.476	0.597	139.5	288.5	0.312D	0.881	1.92	1.821	68.6	281.2	3.3	0.997
7.81	27.39	127.2	+/-	20.2	0.5	88.2	0.0	1.416	1.344	340.5	-14.9	18.501	0.217	5.840	165.0	7.6	169.4	107.1	1.021
44960.0	45171.9	0.371	50.8	23.9	2.38	0.860	69.6	0.432	0.773	146.6	467.4	0.439	1.107	-1.20	1.215	115.3	270.5	-2.5	0.534
45171.9	45278.0	0.534	249.6	3.4	1.98	1.023	63.5	0.497	0.581	142.6	280.7	0.292D	0.869	2.65	1.808	65.9	284.3	4.1	1.063
7.82	29.34	737.4	+/-	21.7	2.7	99.1	0.0	1.452	1.344	351.3	-15.8	18.788	0.208	6.054	164.2	8.9	171.9	107.1	0.897

ARRIVAL DATE = 2445280.0

44780.0	45068.5	0.589	247.6	-23.6	-1.36	0.929	54.2	0.594	0.906	135.4	468.8	0.368	1.444	2.12	1.286	124.8	105.8	3.0	0.737
45068.5	45280.0	0.737	97.5	-1.3	-1.02	1.188	53.3	0.598	0.743	124.9	434.5	0.298	1.188	3.61	1.876	116.4	138.5	10.5	0.582
12.91	15.19		+/+	9.3	0.0	294.9	0.0	0.739	1.368	192.1	28.0	23.818	0.109	12.319	152.0	9.7	22.4	101.3	1.234
44790.0	45072.8	0.545	258.7	-23.6	-0.43	0.924	57.0	0.556	0.899	134.5	465.1	0.399	1.398	3.01	1.282	122.1	114.3	4.8	0.683
45072.8	45280.0	0.683	105.5	-1.4	-0.94	1.184	56.0	0.560	0.738	122.6	425.3	0.325	1.152	3.75	1.874	112.4	149.2	13.1	0.498
11.83	12.75		+/+	10.7	0.0	301.7	0.0	0.773	1.368	201.1	34.9	22.336	0.127	10.689	145.0	8.8	33.1	98.7	1.231
44800.0	45077.2	0.509	269.4	-22.9	0.38	0.920	59.4	0.523	0.891	134.0	462.0	0.425	1.358	3.71	1.277	119.9	122.8	6.5	0.638
45077.2	45280.0	0.638	113.4	-1.4	-0.88	1.179	58.2	0.527	0.734	120.8	416.6	0.347	1.120	3.88	1.871	108.8	161.5	15.9	0.437
10.94	10.97		+/+	12.2	0.0	308.7	0.0	0.807	1.368	210.2	39.9	21.130	0.146	9.400	140.0	8.8	45.2	96.5	1.224
44810.0	45081.7	0.478	279.7	-21.3	1.10	0.915	61.5	0.495	0.884	133.8	459.5	0.447	1.322	4.25	1.273	118.0	131.1	8.0	0.600
45081.7	45280.0	0.600	121.2	-1.4	-0.83	1.175	60.1	0.499	0.729	119.6	408.3	0.365	1.092	3.99	1.869	105.6	175.3	18.4	0.397
10.21	9.82		+/+	13.7	0.0	315.9	0.0	0.843	1.368	219.3	43.4	20.138	0.165	8.409	136.4	9.3	58.6	94.8	1.219
44820.0	45086.3	0.452	289.5	-19.0	1.75	0.912	63.3	0.471	0.877	134.0	457.5	0.464	1.290	4.64	1.269	116.4	139.5	9.3	0.569
45086.3	45280.0	0.569	129.0	-1.5	-0.81	1.170	61.6	0.475	0.724	118.9	400.1	0.380	1.068	4.10	1.866	102.7	190.0	20.2	0.377
9.60	9.26		+/+	15.0	0.0	323.2	0.0	0.879	1.368	228.2	45.8	19.314	0.183	7.663	134.0	10.0	72.6	93.5	1.220
44830.0	45091.1	0.430	298.8	-16.2	2.35	0.908	64.9	0.450	0.870	134.5	455.9	0.479	1.261	4.90	1.265	115.1	147.8	10.4	0.543
45091.1	45280.0	0.543	136.8	-1.5	-0.79	1.165	62.9	0.455	0.719	118.5	392.2	0.391	1.046	4.21	1.864	99.9	204.6	21.0	0.376
9.10	9.22		+/+	16.2	0.0	330.8	0.0	0.916	1.368	237.1	47.2	18.626	0.201	7.106	132.4	10.8	86.3	92.5	1.228
44840.0	45096.1	0.412	307.7	-12.9	2.89	0.905	66.3	0.432	0.863	135.1	454.8	0.490	1.235	5.04	1.260	114.1	156.3	11.2	0.521
45096.1	45280.0	0.521	144.7	-1.6	-0.79	1.160	64.0	0.439	0.713	118.5	384.3	0.400	1.026	4.32	1.861	97.3	217.9	20.9	0.390
8.69	9.62		+/+	17.2	0.0	338.7	0.0	0.954	1.368	245.8	47.9	18.047	0.218	6.701	131.7	11.4	98.7	92.0	1.242
44850.0	45101.3	0.396	316.1	-9.3	3.38	0.902	67.5	0.417	0.856	135.9	454.0	0.499	1.212	5.06	1.256	113.2	164.8	11.7	0.504
45101.3	45280.0	0.504	152.7	-1.7	-0.81	1.154	64.9	0.426	0.707	118.8	376.4	0.406	1.008	4.43	1.857	94.9	229.4	20.2	0.415
8.35	10.35		+/+	17.9	0.0	346.9	0.0	0.993	1.368	254.3	47.9	17.560	0.233	6.417	131.6	11.8	109.5	91.7	1.264
44860.0	45106.6	0.383	324.2	-5.4	3.81	0.899	68.5	0.405	0.848	136.8	453.7	0.505	1.192	4.96	1.252	112.5	173.5	11.8	0.490
45106.6	45280.0	0.490	160.9	-1.8	-0.85	1.148	65.6	0.415	0.701	119.4	368.6	0.410	0.991	4.56	1.854	92.5	239.1	19.1	0.449
8.08	11.32		+/+	18.5	0.0	355.3	0.0	1.033	1.368	262.6	47.3	17.156	0.247	6.233	132.3	11.9	118.7	91.9	1.291
44870.0	45112.2	0.373	332.0	-1.4	4.18	0.897	69.4	0.396	0.841	137.8	453.7	0.508	1.174	4.76	1.248	112.1	182.3	11.6	0.479
45112.2	45280.0	0.479	169.2	-2.0	-0.91	1.142	66.1	0.407	0.694	120.3	360.7	0.411	0.976	4.71	1.850	90.2	247.2	18.1	0.489
7.86	12.47		+/+	18.8	0.0	4.1	0.0	1.074	1.368	270.7	46.1	16.826	0.258	6.128	133.5	11.7	126.4	92.4	1.323
44880.0	45117.9	0.365	339.7	2.6	4.47	0.894	70.1	0.389	0.834	138.8	454.1	0.510	1.158	4.45	1.244	111.7	191.3	11.0	0.471
45117.9	45280.0	0.471	177.7	-2.2	-1.01	1.135	66.5	0.402	0.686	121.5	352.8	0.410D	0.962	4.89	1.846	87.9	254.1	17.2	0.533
7.68	13.75		+/+	18.9	0.0	13.3	0.0	1.116	1.368	278.7	44.2	16.574	0.267	6.081	135.4	11.1	133.0	93.3	1.354
44890.0	45123.9	0.358	347.4	6.6	4.67	0.891	70.7	0.384	0.827	139.9	454.7	0.509	1.144	4.04	1.240	111.6	200.5	10.0	0.466
45123.9	45280.0	0.466	186.3	-2.6	-1.19	1.128	66.8	0.399	0.678	123.0	344.8	0.407D	0.948	5.14	1.841	85.7	260.0	16.5	0.581
7.54	15.14		+/+	19.0	0.0	22.7	0.0	1.158	1.368	286.7	41.9	16.404	0.272	6.066	137.9	10.3	138.6	94.5	1.380
44900.0	45130.1	0.353	355.3	10.4	4.77	0.888	71.2	0.381	0.819	141.0	455.7	0.507	1.132	3.52	1.236	111.5	209.8	8.8	0.464
45130.1	45280.0	0.464	195.0	-3.3	-1.49	1.120	67.0	0.399	0.669	124.7	336.8	0.402D	0.936	5.52	1.835	83.4	265.2	16.1	0.631
7.43	16.62		+/+	19.1	0.0	32.4	0.0	1.200	1.368	294.6	39.4	16.330	0.275	6.036	140.5	9.2	143.3	96.0	1.386
44910.0	45136.5	0.349	3.4	14.0	4.75	0.885	71.5	0.382	0.812	142.1	456.9	0.502	1.122	2.92	1.233	111.7	219.4	7.2	0.465
45136.5	45280.0	0.465	203.9	-4.7	-2.11	1.110	67.0	0.402	0.659	126.7	328.7	0.394D	0.923	6.22	1.829	81.2	269.9	16.6	0.687
7.36	18.25		+/+	19.5	0.0	42.6	0.0	1.243	1.368	302.6	37.7	16.418	0.274	5.912	142.3	7.9	147.2	97.9	1.347
44920.0	45143.2	0.350	11.9	17.1	4.61	0.881	71.4	0.386	0.804	143.1	458.6	0.494	1.115	2.24	1.229	112.1	229.3	5.4	0.471
45143.2	45280.0	0.471	213.0	-8.7	-4.05	1.100	66.9	0.407	0.647	129.0	320.3	0.384D	0.911	8.23	1.822	78.8	274.7	19.8	0.756
7.37	20.29		+/+	21.5	0.0	53.3	0.0	1.287	1.368	309.7	41.2	16.961	0.267	5.349	138.7	6.8	149.4	100.2	1.160
44940.0	45156.5	0.346	25.9	22.0	3.83	0.873	71.6	0.395	0.789	145.2	461.7	0.478	1.101	0.64	1.222	112.8	248.8	1.5	0.483
45156.5	45280.0	0.483	230.7	9.4	4.58	1.075	66.5	0.426	0.623	134.1	304.1	0.357D	0.888	-0.25	1.805	74.1	280.7	-0.5	0.831
7.29	22.49		+/-	19.7	0.0	74.4	0.0	1.367	1.368	327.4	-23.6	17.104	0.254	5.859	155.7	5.8	162.1	105.5	1.232

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA RAP	THET1 THET1 DECLP	THET2 THET2 VP	PERIH PERIH -A	APHEL APHEL E	I 2 I 2 INCL	V 2 V 2 LAM1	PSI 2 PSI 2 LAM2	R. A R A ETA	DECL DECL	SPEED SPEED PERIC
44950.0	45162.7	0.338	39.2	23.6	3.22	0.868	72.0	0.395	0.782	146.5	462.9	0.473	1.091	-0.24	1.219	112.9	258.2	-0.5	0.485
45162.7	45280.0	0.485	239.1	4.7	2.32	1.060	66.1	0.439	0.610	136.7	296.8	0.342D	0.878	2.07	1.796	71.9	283.8	4.0	0.886
7.14	24.12		+/-	19.7	0.0	84.4	0.0	1.403	1.368	338.1	-15.3	17.168	0.252	5.842	164.5	6.2	164.7	105.7	1.220
44960.0	45169.3	0.335	48.9	24.4	2.50	0.862	72.1	0.400	0.775	147.7	464.5	0.465	1.085	-1.11	1.215	113.3	267.8	-2.5	0.493
45169.3	45280.0	0.493	247.6	3.0	1.56	1.043	65.7	0.455	0.596	139.6	289.1	0.325D	0.867	2.91	1.785	69.5	287.0	5.2	0.945
7.08	25.86		+/-	21.0	0.0	94.9	0.0	1.438	1.368	347.7	-15.3	17.649	0.244	5.500	164.7	7.5	167.4	106.6	1.096
44970.0	45176.0	0.334	58.8	24.5	1.68	0.855	72.1	0.408	0.768	148.9	466.2	0.455	1.081	-1.96	1.211	113.8	277.6	-4.3	0.504
45176.0	45280.0	0.504	256.0	2.2	1.20	1.024	55.2	0.474	0.581	142.6	281.5	0.305D	0.856	3.35	1.772	67.0	290.1	5.4	1.005
7.06	27.63	415.5	+/-	22.6	1.6	105.7	0.0	1.473	1.368	357.9	-16.9	18.028	0.234	5.495	163.0	9.2	169.9	106.9	0.961
									ARRIVAL DATE = 2445282.0										
44780.0	45069.3	0.609	247.1	-23.3	-1.25	0.929	52.8	0.612	0.906	136.3	471.0	0.352	1.460	2.22	1.286	126.2	106.0	3.0	0.765
45069.3	45282.0	0.765	98.0	-0.5	-0.38	1.187	51.8	0.519	0.742	126.5	441.8	0.283	1.201	4.05	1.845	119.3	139.6	9.9	0.659
13.43	17.42		+/+	8.7	0.0	296.2	0.0	0.746	1.388	192.6	23.5	24.594	0.101	13.147	156.4	10.6	17.2	102.5	1.229
44790.0	45073.4	0.560	258.4	-23.4	-0.31	0.924	56.0	0.569	0.899	135.0	466.7	0.387	1.410	3.11	1.281	123.1	114.6	4.8	0.703
45073.4	45282.0	0.703	106.0	-0.5	-0.35	1.183	54.9	0.575	0.738	123.7	432.4	0.314	1.162	4.11	1.843	115.0	149.0	12.3	0.563
12.20	14.62		+/+	10.1	0.0	302.8	0.0	0.778	1.388	201.6	31.3	22.863	0.120	11.394	148.6	9.5	26.3	99.5	1.246
44800.0	45077.7	0.519	269.2	-22.7	0.48	0.920	58.7	0.533	0.891	134.3	463.1	0.417	1.366	3.80	1.277	120.6	123.0	6.4	0.651
45077.7	45282.0	0.651	113.8	-0.5	-0.32	1.179	57.5	0.537	0.733	121.6	423.5	0.339	1.128	4.15	1.840	111.2	159.6	14.7	0.488
11.19	12.46		+/+	11.5	0.0	309.5	0.0	0.811	1.388	210.6	36.9	21.453	0.140	9.982	142.9	9.1	36.8	97.1	1.254
44810.0	45082.0	0.484	279.6	-21.2	1.18	0.915	61.1	0.501	0.884	134.0	460.2	0.441	1.327	4.31	1.273	118.4	131.3	7.9	0.608
45082.0	45282.0	0.609	121.5	-0.5	-0.30	1.175	59.6	0.505	0.729	120.1	415.1	0.361	1.097	4.20	1.838	107.8	171.6	17.2	0.434
10.36	10.90		+/+	12.9	0.0	316.4	0.0	0.845	1.388	219.6	40.8	20.292	0.160	8.893	139.0	9.4	48.5	95.1	1.262
44820.0	45086.5	0.455	289.5	-19.0	1.79	0.912	63.1	0.473	0.877	134.1	457.8	0.462	1.292	4.67	1.269	116.6	139.6	9.3	0.573
45086.5	45282.0	0.573	129.2	-0.5	-0.28	1.170	61.4	0.478	0.724	119.0	406.9	0.378	1.071	4.24	1.836	104.8	184.8	19.2	0.399
9.67	9.89		+/+	14.2	0.0	323.5	0.0	0.880	1.388	228.5	43.4	19.323	0.181	8.070	136.3	10.1	61.2	93.6	1.276
44830.0	45091.1	0.430	298.8	-16.2	2.35	0.908	64.9	0.450	0.870	134.5	455.9	0.479	1.261	4.90	1.265	115.1	147.8	10.4	0.543
45091.1	45282.0	0.543	136.9	-0.5	-0.28	1.166	62.9	0.455	0.719	118.4	398.9	0.392	1.047	4.27	1.833	101.9	198.6	20.5	0.382
9.11	9.40		+/+	15.4	0.0	330.9	0.0	0.916	1.388	237.3	44.9	18.507	0.201	7.460	134.6	10.8	74.2	92.5	1.298
44840.0	45095.9	0.409	307.7	-13.0	2.85	0.905	66.4	0.430	0.863	135.1	454.5	0.492	1.234	5.01	1.260	113.9	156.1	11.2	0.518
45095.9	45282.0	0.518	144.6	-0.5	-0.27	1.161	64.2	0.436	0.714	118.1	391.1	0.403	1.026	4.31	1.830	99.3	212.1	20.9	0.381
8.64	9.37		+/+	16.4	0.0	338.4	0.0	0.953	1.388	245.8	45.6	17.814	0.221	7.019	133.9	11.4	86.8	91.8	1.328
44850.0	45100.9	0.391	316.1	-9.4	3.30	0.902	67.8	0.413	0.856	135.9	453.5	0.503	1.209	5.00	1.256	112.9	164.5	11.7	0.498
45100.9	45282.0	0.498	152.5	-0.6	-0.27	1.156	65.2	0.420	0.709	118.2	383.3	0.411	1.007	4.35	1.828	96.8	224.5	20.5	0.392
8.25	9.70		+/+	17.1	0.0	346.3	0.0	0.990	1.388	254.2	45.6	17.222	0.239	6.714	133.9	11.8	98.4	91.5	1.367
44860.0	45106.1	0.376	324.2	-5.5	3.70	0.900	69.0	0.399	0.849	136.8	452.9	0.510	1.187	4.88	1.252	112.1	173.0	11.9	0.481
45106.1	45282.0	0.481	160.4	-0.6	-0.28	1.151	66.0	0.407	0.703	118.6	375.6	0.417	0.989	4.39	1.824	94.5	235.3	19.6	0.414
7.93	10.32		+/+	17.6	0.0	354.5	0.0	1.029	1.388	262.3	44.8	16.715	0.256	6.523	134.6	11.9	108.6	91.5	1.415
44870.0	45111.4	0.364	331.9	-1.5	4.04	0.897	70.0	0.387	0.841	137.9	452.6	0.516	1.167	4.66	1.248	111.5	181.6	11.7	0.467
45111.4	45282.0	0.467	168.6	-0.7	-0.29	1.145	66.7	0.397	0.697	119.3	367.8	0.420	0.973	4.43	1.821	92.2	244.6	18.5	0.444
7.66	11.17		+/+	17.9	0.0	2.9	0.0	1.068	1.388	270.3	43.3	16.286	0.271	6.426	136.2	11.7	117.5	91.9	1.471
44880.0	45117.0	0.353	339.6	2.6	4.30	0.894	70.9	0.378	0.834	139.0	452.7	0.519	1.150	4.34	1.244	111.0	190.4	11.1	0.457
45117.0	45282.0	0.457	176.8	-0.7	-0.31	1.139	67.3	0.390	0.690	120.3	360.0	0.421D	0.959	4.48	1.817	90.0	252.5	17.3	0.479
7.44	12.17		+/+	18.0	0.0	11.7	0.0	1.109	1.388	278.1	41.0	15.930	0.284	6.405	138.5	11.2	125.1	92.7	1.533
44890.0	45122.7	0.344	347.2	6.6	4.49	0.892	71.6	0.371	0.827	140.2	453.2	0.520	1.134	3.91	1.240	110.7	199.4	10.1	0.449
45122.7	45282.0	0.449	185.2	-0.8	-0.35	1.132	67.7	0.385	0.682	121.6	352.2	0.420D	0.945	4.55	1.812	87.8	259.2	16.1	0.518
7.26	13.30		+/+	17.9	0.0	20.8	0.0	1.150	1.388	285.9	37.8	15.649	0.293	6.441	141.8	10.2	131.6	93.9	1.596
44900.0	45128.7	0.336	354.8	10.4	4.58	0.889	72.2	0.367	0.820	141.5	453.9	0.519	1.121	3.40	1.237	110.6	208.5	8.9	0.444
45128.7	45282.0	0.444	193.8	-1.0	-0.41	1.125	68.0	0.382	0.674	123.1	344.3	0.417D	0.932	4.63	1.808	85.7	265.1	15.1	0.560
7.10	14.53		+/+	17.7	0.0	30.2	0.0	1.191	1.388	293.8	33.9	15.448	0.300	6.505	145.8	9.1	137.3	95.4	1.652
44910.0	45134.8	0.330	2.7	14.0	4.56	0.886	72.7	0.364	0.813	142.7	454.8	0.517	1.109	2.79	1.233	110.5	217.7	7.3	0.441
45134.8	45282.0	0.442	202.4	-1.2	-0.52	1.117	68.1	0.382	0.665	124.9	336.4	0.411D	0.920	4.76	1.802	83.5	270.2	14.3	0.604
6.97	15.82		+/+	17.5	0.0	39.9	0.0	1.232	1.388	301.7	29.2	15.334	0.304	6.557	150.6	7.6	142.3	97.1	1.689
44920.0	45141.0	0.324	10.8	17.3	4.42	0.882	73.2	0.363	0.805	144.0	456.0	0.513	1.098	2.12	1.229	110.6	227.1	5.5	0.441
45141.0	45282.0	0.441	211.0	-1.7	-0.73	1.108	68.2	0.384	0.656	126.8	328.5	0.404D	0.908	5.01	1.796	81.4	274.8	13.8	0.651
6.86	17.19		+/+	17.6	0.0	49.8	0.0	1.272	1.388	309.9	24.4	15.322	0.305	6.543	155.5	6.1	146.6	99.0	1.688
44930.0	45147.4	0.319	19.3	20.1	4.16	0.879	73.5	0.364	0.798	145.2	457.3	0.507	1.089	1.38	1.226	110.8	236.6	3.6	0.443
45147.4	45282.0	0.443	219.8	-3.1	-1.36	1.098	68.2	0.389	0.646	129.1	320.6	0.394D	0.897	5.65	1.789	79.2	279.1	14.3	0.702
6.76	18.69		+/+	18.1	0.0	59.9	0.0	1.313	1.388	318.3	21.8	15.463	0.302	6.368	158.2	4.9	150.2	100.8	1.619
44940.0	45155.8	0.337	29.5	22.1	3.81	0.873	72.2	0.387	0.790	145.5	460.9	0.484	1.095	0.62	1.222	112.3	248.1	1.5	0.473
45155.8	45282.0	0.473	229.9	17.4	8.11	1.084	68.0	0.400	0.631	132.3	310.3	0.379D	0.883	-3.78	1.779	76.4	283.6	-8.7	0.756
7.12	20.29	179.7	+/-	24.0	0.7	73.3	0.0	1.363	1.388	321.2	-41.3	17.280	0.265	4.968	137.2	5.4	156.5	106.4	1.010
44950.0	45160.3	0.309	37.3	24.0	3.24	0.869	74.0	0.370	0.784	147.8	460.2	0.494	1.073	-0.22	1.219	111.3	255.6	-0.6	0.452
45160.3	45282.0	0.452	237.0	3.8	1.72	1.075	67.8	0.407	0.622	134.1	305.0	0.369D	0.875	2.62	1.773	74.9	285.8	5.7	0.787
6.58	21.20		+/-	19.1	0.0	80.5	0.0	1.389	1.388	335.9	-13.2	15.914	0.290	6.035	166.7	4.9	159.6	104.2	1.459
44960.0	45166.7	0.304	46.7	24.9	2.61	0.863	74.3	0.373	0.777	149.2	461.7	0.487	1.066	-1.03	1.216	111.6	265.0	-2.5	0.458
45166.7	45282.0	0.458	245.4	1.8	0.82	1.061	67.5	0.419	0.610	136.7	297.4	0.354D	0.865	3.55	1.763	72.7	289.2	7.1	0.840
6.48	22.76		+/-	20.1	0.0	90.7	0.0	1.425	1.388	345.3	-12.4	16.260	0.283	5.732	167.6	6.3	162.2	105.1	1.338
44970.0	45173.2	0.300	56.2	25.2	1.89	0.857	74.5	0.378	0.769	150.6	463.3	0.478	1.060	-1.81	1.212	112.0	274.5	-4.4	0.466
45173.2	45282.0	0.466	253.6	1.1	0.55	1.044	67.2	0.435	0.596	139.6	289.9	0.337D	0.855	3.85	1.753	70.4	292.4	7.1	0.893
6.40	24.31		+/-	21.6	0.0	101.1	0.0	1.458	1.388	354.5	-14.9	16.756	0.273	5.347	165.0	8.0	165.1	106.1	1.188
44980.0	45179.7	0.297	65.7	24.6	1.10	0.850	74.7	0.384	0.762	152.0	465.0	0.469	1.055	-2.55	1.208	112.4	284.0	-6.0	0.475
45179.7	45282.0	0.475	261.7	0.8	0.42	1.025	66.8	0.453	0.581	142.6	282.4	0.318D	0.844	4.00	1.741	68.1	295.4	6.8	0.946
6.35	25.90	44.1	+/-	23.3	0.2	111.6	0.0	1.491	1.388	3.7	-17.2	17.325	0.263	4.998	162.6	9.7	167.8	107.1	1.040

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44990.0	45186.2	0.296	75.1	23.4	0.26	0.842	74.9	0.392	0.755	153.4	466.7	0.459	1.051	-3.21	1.205	112.9	293.5	-7.4	0.486
45186.2	45282.0	0.486	269.6	0.7	0.35	1.003	66.3	0.474	0.565	145.8	275.0	0.298D	0.833	4.10	1.727	65.6	298.4	6.5	1.001
6.32	27.52	732.4	+/-	25.2	2.9	122.2	0.0	1.521	1.388	14.2	-18.6	17.584	0.251	5.179	161.0	11.3	170.4	107.0	0.902
45040.0	45150.3	0.384	2.8	18.8	6.88	0.947	110.5	0.364	0.896	233.2	438.8	0.569	1.222A	-7.87	1.281	108.4	248.9	-21.9	0.446
45150.3	45282.0	0.446	223.7	-5.2	-2.28	1.093	68.1	0.392	0.640	130.2	317.0	0.389D	0.892	6.59	1.786	78.2	281.0	16.0	0.730
8.08	19.51	941.2	+/+	29.6	4.1	64.6	0.0	1.331	1.388	337.6	-33.0	16.626	0.298	4.524	142.9	22.3	151.1	87.5	0.868
							ARRIVAL DATE = 2445284.0												
44780.0	45070.2	0.635	246.5	-23.0	-1.11	0.929	51.2	0.634	0.906	137.4	473.5	0.332	1.480	2.35	1.286	127.9	106.2	3.0	0.799
45070.2	45284.0	0.799	98.5	0.4	0.36	1.186	50.0	0.642	0.741	128.5	448.9	0.265	1.218	4.60	1.817	122.4	141.1	9.6	0.742
14.09	19.87		+/+	8.2	0.0	297.7	0.0	0.753	1.405	192.9	18.4	25.561	0.093	14.059	161.6	11.8	13.1	104.0	1.211
44790.0	45074.2	0.579	258.0	-23.2	-0.17	0.924	54.8	0.586	0.899	135.8	468.7	0.372	1.425	3.25	1.281	124.4	114.9	4.7	0.728
45074.2	45284.0	0.728	106.5	0.4	0.32	1.182	53.6	0.593	0.737	125.2	439.2	0.300	1.175	4.55	1.815	117.7	149.6	11.6	0.634
12.67	16.70		+/+	9.4	0.0	304.0	0.0	0.784	1.405	202.0	27.2	23.551	0.112	12.202	152.6	10.3	20.9	100.7	1.251
44800.0	45078.3	0.533	269.0	-22.5	0.62	0.920	57.9	0.545	0.891	134.7	464.6	0.405	1.377	3.91	1.277	121.5	123.3	6.4	0.670
45078.3	45284.0	0.670	114.3	0.4	0.29	1.178	56.6	0.551	0.733	122.7	430.2	0.329	1.137	4.50	1.813	113.6	159.0	13.8	0.548
11.52	14.19		+/+	10.8	0.0	310.5	0.0	0.816	1.405	211.1	33.5	21.919	0.132	10.654	146.3	9.6	29.9	97.9	1.274
44810.0	45082.5	0.494	279.5	-21.1	1.29	0.915	60.5	0.510	0.884	134.3	461.3	0.434	1.335	4.40	1.273	119.0	131.6	7.9	0.621
45082.5	45284.0	0.621	122.0	0.4	0.27	1.174	59.0	0.515	0.729	120.8	421.6	0.353	1.104	4.46	1.811	110.0	169.4	16.0	0.482
10.58	12.26		+/+	12.2	0.0	317.2	0.0	0.849	1.405	220.0	37.9	20.575	0.153	9.448	141.8	9.7	40.1	95.7	1.297
44820.0	45086.9	0.461	289.4	-18.9	1.87	0.912	62.7	0.479	0.877	134.2	458.5	0.457	1.297	4.73	1.269	117.0	139.8	9.2	0.581
45086.9	45284.0	0.581	129.6	0.4	0.25	1.170	61.0	0.484	0.724	119.4	413.3	0.373	1.075	4.43	1.808	106.8	181.0	18.0	0.433
9.81	10.88		+/+	13.5	0.0	324.1	0.0	0.883	1.405	228.9	40.7	19.456	0.176	8.534	138.9	10.2	51.2	94.0	1.323
44830.0	45091.3	0.433	298.8	-16.2	2.39	0.908	64.7	0.453	0.870	134.5	456.3	0.476	1.264	4.93	1.265	115.3	148.0	10.4	0.547
45091.3	45284.0	0.547	137.1	0.5	0.24	1.166	62.7	0.458	0.720	118.5	405.4	0.390	1.050	4.40	1.806	103.9	193.4	19.5	0.402
9.17	9.98		+/+	14.6	0.0	331.2	0.0	0.918	1.405	237.5	42.5	18.511	0.198	7.858	137.0	10.8	63.1	92.7	1.358
44840.0	45095.9	0.410	307.7	-13.0	2.86	0.905	66.4	0.430	0.863	135.1	454.5	0.492	1.234	5.01	1.260	113.9	156.1	11.2	0.519
45095.9	45284.0	0.519	144.7	0.5	0.23	1.162	64.1	0.436	0.715	118.0	397.5	0.403	1.027	4.36	1.803	101.2	206.3	20.4	0.386
8.64	9.53		+/+	15.6	0.0	338.5	0.0	0.953	1.405	245.9	43.2	17.704	0.220	7.368	136.2	11.4	75.1	91.9	1.403
44850.0	45100.7	0.389	316.1	-9.4	3.27	0.902	67.9	0.411	0.856	135.9	453.2	0.504	1.207	4.98	1.256	112.8	164.4	11.7	0.495
45100.7	45284.0	0.495	152.4	0.5	0.23	1.157	65.3	0.418	0.710	117.8	389.8	0.413	1.007	4.33	1.801	98.7	218.8	20.5	0.384
8.20	9.46		+/+	16.4	0.0	346.1	0.0	0.989	1.405	254.1	43.2	17.011	0.242	7.031	136.2	11.8	86.9	91.4	1.458
44860.0	45105.7	0.372	324.1	-5.5	3.63	0.900	69.2	0.395	0.849	136.8	452.3	0.514	1.184	4.84	1.252	111.8	172.7	11.9	0.475
45105.7	45284.0	0.475	160.2	0.5	0.23	1.152	66.3	0.403	0.705	118.0	382.1	0.421	0.989	4.30	1.798	96.3	230.4	19.9	0.393
7.83	9.73		+/+	16.9	0.0	353.9	0.0	1.026	1.405	262.1	42.3	16.412	0.262	6.821	137.0	12.0	97.7	91.3	1.526
44870.0	45110.9	0.357	331.9	-1.5	3.94	0.897	70.4	0.381	0.842	138.0	451.8	0.521	1.163	4.59	1.248	111.1	181.2	11.7	0.459
45110.9	45284.0	0.459	168.1	0.5	0.24	1.147	67.1	0.390	0.699	118.5	374.5	0.426	0.972	4.27	1.794	94.1	240.6	18.9	0.411
7.52	10.25		+/+	17.1	0.0	2.1	0.0	1.064	1.405	269.9	40.6	15.895	0.281	6.716	138.8	11.8	107.5	91.7	1.605
44880.0	45116.2	0.344	339.5	2.5	4.18	0.895	71.4	0.371	0.835	139.2	451.7	0.525	1.144	4.25	1.244	110.5	189.8	11.2	0.446
45116.2	45284.0	0.446	176.2	0.6	0.25	1.142	67.8	0.380	0.693	119.3	366.8	0.429	0.956	4.23	1.791	91.9	249.6	17.6	0.437
7.27	10.96		+/+	17.2	0.0	10.5	0.0	1.103	1.405	277.5	37.9	15.455	0.297	6.702	141.5	11.2	116.1	92.4	1.694
44890.0	45121.7	0.333	346.9	6.5	4.35	0.892	72.3	0.362	0.828	140.5	451.9	0.528	1.127	3.82	1.241	110.1	198.5	10.2	0.436
45121.7	45284.0	0.437	184.3	0.6	0.27	1.136	68.3	0.373	0.686	120.4	359.1	0.430D	0.942	4.19	1.787	89.8	257.3	16.2	0.467
7.04	11.83		+/+	17.0	0.0	19.3	0.0	1.143	1.405	285.1	34.2	15.087	0.311	6.748	145.2	10.3	123.5	93.5	1.788
44900.0	45127.5	0.324	354.5	10.4	4.44	0.889	73.0	0.356	0.820	141.9	452.4	0.529	1.112	3.30	1.237	109.8	207.4	9.0	0.429
45127.5	45284.0	0.429	192.7	0.7	0.30	1.129	68.8	0.368	0.679	121.7	351.4	0.429D	0.929	4.13	1.783	87.7	263.9	14.9	0.501
6.85	12.81		+/+	16.8	0.0	28.4	0.0	1.183	1.405	292.7	29.4	14.805	0.322	6.843	150.2	9.0	130.1	94.9	1.880
44910.0	45133.4	0.315	2.1	14.0	4.42	0.887	73.7	0.351	0.813	143.3	453.2	0.528	1.099	2.70	1.233	109.7	216.4	7.4	0.424
45133.4	45284.0	0.424	201.1	0.9	0.35	1.122	69.0	0.366	0.671	123.3	343.7	0.425D	0.917	4.06	1.778	85.6	269.7	13.5	0.537
6.68	13.87		+/+	16.6	0.0	37.7	0.0	1.222	1.405	300.5	23.2	14.602	0.330	6.928	156.4	7.5	135.9	96.6	1.953
44920.0	45139.4	0.307	10.0	17.3	4.30	0.883	74.3	0.349	0.806	144.7	454.2	0.525	1.087	2.04	1.230	109.6	225.5	5.6	0.421
45139.4	45284.0	0.421	209.5	1.1	0.45	1.115	69.2	0.366	0.662	125.1	335.9	0.420D	0.905	3.94	1.772	83.6	274.8	12.1	0.576
6.53	15.00		+/+	16.5	0.0	47.2	0.0	1.262	1.405	308.4	15.8	14.499	0.334	6.962	163.8	5.9	141.0	98.5	1.990
44930.0	45145.5	0.300	18.1	20.2	4.07	0.879	74.8	0.347	0.799	146.2	455.3	0.522	1.077	1.32	1.226	109.7	234.6	3.6	0.420
45145.5	45284.0	0.421	218.0	1.6	0.64	1.106	69.3	0.368	0.653	127.1	328.2	0.413D	0.894	3.73	1.766	81.6	279.3	10.6	0.616
6.39	16.17		+/+	16.7	0.0	56.9	0.0	1.301	1.405	316.6	7.1	14.499	0.335	6.879	172.5	4.3	145.7	100.2	1.969
44940.0	45151.7	0.293	26.6	22.6	3.72	0.875	75.2	0.348	0.792	147.7	456.6	0.517	1.067	0.56	1.223	109.8	243.8	1.5	0.422
45151.7	45284.0	0.422	226.5	2.9	1.18	1.097	69.3	0.373	0.643	129.3	320.5	0.403D	0.883	3.17	1.760	79.6	283.4	8.4	0.656
6.26	17.34		+/+	17.4	0.0	66.8	0.0	1.339	1.405	325.0	-4.4	14.638	0.333	6.607	175.0	3.4	150.2	101.8	1.865
44950.0	45159.9	0.305	37.0	24.0	3.24	0.869	74.3	0.366	0.784	148.0	459.8	0.497	1.071	-0.22	1.219	111.0	255.2	-0.6	0.447
45159.9	45284.0	0.447	236.4	-16.5	-7.19	1.083	69.2	0.383	0.629	132.5	310.6	0.389D	0.870	11.51	1.750	76.9	290.7	26.1	0.774
6.50	20.80		+/-	24.4	0.0	79.9	0.0	1.387	1.405	328.6	40.4	16.490	0.297	4.738	138.3	4.7	146.7	106.0	1.109
44960.0	45164.2	0.279	44.2	25.4	2.70	0.865	76.1	0.351	0.778	150.8	459.3	0.505	1.051	-0.97	1.216	110.2	262.2	-2.6	0.429
45164.2	45284.0	0.429	243.0	-3.5	-1.51	1.075	69.1	0.389	0.621	134.2	305.5	0.380D	0.863	5.82	1.744	75.5	291.1	13.1	0.755
6.01	20.26		+/-	19.2	0.0	86.8	0.0	1.411	1.405	342.5	2.9	15.116	0.322	6.007	175.8	5.2	155.4	104.3	1.611
44970.0	45170.4	0.272	53.2	25.7	2.07	0.859	76.6	0.353	0.771	152.5	460.8	0.499	1.044	-1.70	1.213	110.4	271.3	-4.4	0.434
45170.4	45284.0	0.434	251.1	-1.6	-0.72	1.061	68.8	0.401	0.609	136.8	298.2	0.365D	0.853	5.01	1.735	73.5	294.2	10.5	0.795
5.88	21.44		+/-	20.4	0.0	96.7	0.0	1.444	1.405	351.6	-8.0	15.447	0.315	5.653	171.5	7.0	159.3	104.9	1.465
44980.0	45176.6	0.266	62.1	25.4	1.38	0.852	77.1	0.357	0.765	154.2	462.3	0.491	1.038	-2.37	1.209	110.7	280.4	-6.1	0.440
45176.6	45284.0	0.440	259.0	-1.1	-0.48	1.046	68.6	0.415	0.596	139.6	291.0	0.349D	0.844	4.75	1.725	71.4	297.2	9.3	0.840
5.78	22.75		+/-	22.0	0.0	106.7	0.0	1.476	1.405	0.5	-13.3	15.901	0.306	5.249	166.2	8.7	162.5	105.7	1.299
44990.0	45182.8	0.261	70.7	24.3	0.65	0.844	77.6	0.362	0.758	156.0	463.9	0.483	1.032	-2.96	1.206	111.1	289.5	-7.5	0.448
45182.8	45284.0	0.448	266.6	-0.8	-0.37	1.028	68.3	0.431	0.583	142.5	283.9	0.332D	0.834	4.61	1.713	69.2	300.2	8.4	0.886
5.69	24.11		+/-	23.7	0.0	116.7	0.0	1.505	1.405	9.3	-16.4	16.430	0.295	4.865	163.0	10.3	165.5	106.7	1.142

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
45000.0	45189.1	0.257	79.2	22.7	-0.11	0.836	78.0	0.369	0.751	157.7	465.6	0.474	1.028	-3.46	1.202	111.5	298.6	-8.5	0.457
45189.1	45284.0	0.457	274.2	-0.6	-0.30	1.008	58.0	0.450	0.568	145.6	276.8	0.312D	0.824	4.53	1.700	67.0	303.2	7.6	0.934
5.64	25.53	245.7	+/-	25.6	1.0	126.8	0.0	1.533	1.405	18.4	-18.0	16.884	0.284	4.697	161.4	11.8	168.3	107.5	0.997
45010.0	45195.4	0.256	87.3	20.7	-0.87	0.827	78.5	0.376	0.745	159.5	467.3	0.465	1.025	-3.86	1.198	112.0	307.8	-9.2	0.466
45195.4	45284.0	0.466	281.4	-0.5	-0.27	0.984	57.7	0.472	0.552	148.7	269.8	0.292D	0.813	4.46	1.685	64.7	306.1	6.9	0.984
5.61	26.99	949.9	+/-	27.7	3.9	137.0	0.0	1.559	1.405	28.2	-18.2	17.119	0.272	4.857	160.9	13.0	170.8	107.8	0.866
45050.0	45169.2	0.329	22.2	16.1	2.40	0.903	107.9	0.355	0.839	222.0	447.7	0.541	1.137A	-4.61	1.255	109.3	275.5	-12.7	0.433
45169.2	45284.0	0.433	249.6	-1.8	-0.79	1.064	68.9	0.398	0.612	136.4	299.5	0.368D	0.855	5.08	1.737	73.8	293.6	10.8	0.788
6.96	21.21	227.1	+/-	27.8	1.0	94.9	0.0	1.438	1.405	356.1	-23.0	16.314	0.316	4.319	155.6	12.7	158.7	98.0	1.001
45060.0	45182.1	0.318	37.2	16.6	0.69	0.880	107.1	0.365	0.815	216.6	453.1	0.518	1.112A	-3.72	1.244	110.4	293.5	-9.8	0.447
45182.1	45284.0	0.447	265.8	-0.8	-0.38	1.030	68.3	0.429	0.584	142.2	284.6	0.334D	0.835	4.62	1.714	69.5	299.9	8.4	0.881
6.75	23.96	819.1	+/-	29.0	3.5	115.6	0.0	1.502	1.405	13.2	-17.9	16.653	0.296	4.542	161.0	10.0	165.2	101.8	0.889

ARRIVAL DATE = 2445286.0

44790.0	45075.1	0.603	257.4	-22.9	0.02	0.924	53.3	0.606	0.898	136.7	471.0	0.354	1.443	3.41	1.281	125.9	115.2	4.7	0.759
45075.1	45286.0	0.759	107.1	1.3	1.08	1.182	52.0	0.615	0.736	126.9	445.9	0.283	1.190	5.09	1.791	120.4	150.7	11.1	0.712
13.26	19.00		+/+	8.8	0.0	305.5	0.0	0.791	1.419	202.4	22.4	24.416	0.103	13.088	157.3	11.3	16.5	102.1	1.242
44800.0	45079.1	0.550	268.6	-22.3	0.79	0.919	56.8	0.561	0.891	135.4	466.5	0.391	1.391	4.07	1.277	122.6	123.7	6.3	0.693
45079.1	45286.0	0.693	114.9	1.3	0.96	1.178	55.4	0.558	0.732	123.9	436.5	0.316	1.148	4.92	1.788	116.0	159.2	13.0	0.615
11.95	16.14		+/+	10.0	0.0	311.8	0.0	0.823	1.419	211.5	29.6	22.536	0.123	11.418	150.1	10.3	24.3	99.0	1.285
44810.0	45083.2	0.507	279.2	-20.9	1.44	0.915	59.7	0.521	0.884	134.6	462.7	0.423	1.345	4.53	1.273	119.9	131.9	7.8	0.638
45083.2	45286.0	0.638	122.5	1.4	0.88	1.174	58.2	0.528	0.728	121.7	427.8	0.344	1.113	4.79	1.786	112.2	168.4	14.9	0.537
10.89	13.88		+/+	11.4	0.0	318.3	0.0	0.854	1.419	220.4	34.6	20.995	0.145	10.080	145.0	10.1	33.1	96.4	1.321
44820.0	45087.4	0.470	289.3	-18.8	1.99	0.911	62.2	0.487	0.877	134.4	459.5	0.450	1.304	4.83	1.269	117.6	140.1	9.2	0.592
45087.4	45286.0	0.592	130.1	1.4	0.81	1.170	60.4	0.493	0.724	120.0	419.5	0.367	1.081	4.67	1.784	108.8	178.5	15.7	0.478
10.02	12.15		+/+	12.7	0.0	324.9	0.0	0.887	1.419	229.2	37.8	19.714	0.169	9.062	141.6	10.4	42.8	94.5	1.360
44830.0	45091.7	0.439	298.7	-16.1	2.47	0.908	64.3	0.458	0.870	134.6	456.9	0.472	1.268	5.00	1.264	115.7	148.2	10.3	0.554
45091.7	45286.0	0.554	137.5	1.4	0.77	1.166	62.4	0.464	0.720	118.8	411.5	0.386	1.054	4.57	1.782	105.7	189.5	18.3	0.434
9.30	10.89		+/+	13.8	0.0	331.7	0.0	0.920	1.419	237.8	39.8	18.633	0.193	8.301	139.6	10.9	53.3	93.1	1.407
44840.0	45096.2	0.412	307.7	-12.9	2.90	0.905	66.2	0.433	0.863	135.1	454.9	0.489	1.236	5.05	1.260	114.1	156.3	11.2	0.522
45096.2	45286.0	0.522	145.0	1.5	0.73	1.162	64.0	0.439	0.716	118.1	403.6	0.401	1.030	4.47	1.779	103.0	201.2	19.5	0.405
8.71	10.06		+/+	14.8	0.0	338.8	0.0	0.954	1.419	246.1	40.7	17.713	0.217	7.757	138.6	11.4	64.4	92.1	1.466
44850.0	45100.8	0.390	316.1	-9.4	3.28	0.902	67.9	0.411	0.856	135.9	453.3	0.504	1.208	4.98	1.256	112.8	164.4	11.7	0.496
45100.8	45286.0	0.496	152.5	1.5	0.71	1.158	65.3	0.418	0.711	117.7	396.0	0.414	1.008	4.38	1.777	100.4	213.1	20.0	0.390
8.21	9.62		+/+	15.6	0.0	346.1	0.0	0.990	1.419	254.2	40.6	16.919	0.241	7.377	138.6	11.8	75.6	91.5	1.538
44860.0	45105.6	0.370	324.1	-5.6	3.61	0.900	69.3	0.393	0.849	136.9	452.1	0.515	1.183	4.82	1.252	111.7	172.6	11.9	0.473
45105.6	45286.0	0.473	160.2	1.6	0.71	1.153	66.4	0.401	0.706	117.7	388.4	0.423	0.989	4.28	1.774	98.0	224.8	19.9	0.386
7.80	9.52		+/+	16.1	0.0	353.7	0.0	1.025	1.419	262.0	39.7	16.231	0.264	7.137	139.5	12.0	86.5	91.3	1.623
44870.0	45110.5	0.353	331.9	-1.6	3.88	0.897	70.6	0.378	0.842	138.0	451.4	0.524	1.160	4.55	1.248	110.9	180.9	11.8	0.454
45110.5	45286.0	0.455	167.9	1.7	0.71	1.149	67.4	0.386	0.701	118.0	380.8	0.430	0.971	4.18	1.771	95.8	235.6	19.1	0.393
7.45	9.71		+/+	16.4	0.0	1.6	0.0	1.062	1.419	269.6	37.8	15.633	0.287	7.010	141.4	11.8	96.7	91.6	1.722
44880.0	45115.7	0.339	339.4	2.5	4.10	0.895	71.8	0.366	0.835	139.3	451.0	0.530	1.140	4.20	1.244	110.2	189.3	11.2	0.439
45115.7	45286.0	0.440	175.7	1.8	0.73	1.144	68.2	0.374	0.695	118.6	373.2	0.435	0.955	4.08	1.768	93.6	245.5	18.0	0.407
7.15	10.12		+/+	16.5	0.0	9.7	0.0	1.100	1.419	277.1	34.9	15.120	0.307	6.987	144.3	11.2	106.1	92.2	1.836
44890.0	45121.1	0.326	346.8	6.5	4.26	0.892	72.8	0.355	0.828	140.7	451.0	0.534	1.122	3.76	1.241	109.7	197.8	10.3	0.427
45121.1	45286.0	0.427	183.7	1.9	0.77	1.138	68.8	0.365	0.689	119.5	365.7	0.438	0.940	3.96	1.764	91.5	254.1	16.5	0.428
6.90	10.72		+/+	16.4	0.0	18.2	0.0	1.138	1.419	284.4	30.8	14.686	0.324	7.032	148.5	10.3	114.5	93.2	1.957
44900.0	45126.6	0.314	354.1	10.4	4.33	0.890	73.6	0.347	0.821	142.2	451.3	0.536	1.106	3.23	1.237	109.3	206.5	9.1	0.418
45126.6	45286.0	0.418	191.8	2.1	0.84	1.133	69.4	0.358	0.683	120.6	358.1	0.438D	0.927	3.82	1.760	89.5	261.6	15.0	0.454
6.67	11.45		+/+	16.2	0.0	26.9	0.0	1.176	1.419	291.8	25.4	14.335	0.339	7.114	153.9	9.1	121.9	94.6	2.075
44910.0	45132.2	0.304	1.6	14.0	4.32	0.887	74.4	0.341	0.814	143.8	451.9	0.536	1.092	2.63	1.233	109.0	215.2	7.5	0.411
45132.2	45286.0	0.411	200.0	2.4	0.94	1.127	69.7	0.354	0.675	122.0	350.5	0.437D	0.914	3.65	1.756	87.5	268.2	13.4	0.483
6.47	12.29		+/+	16.0	0.0	35.9	0.0	1.215	1.419	299.3	18.4	14.073	0.351	7.183	160.8	7.5	128.4	96.3	2.171
44920.0	45138.0	0.294	9.2	17.4	4.21	0.884	75.2	0.337	0.807	145.4	452.7	0.535	1.079	1.98	1.230	108.9	224.1	5.7	0.406
45138.0	45286.0	0.406	208.2	2.9	1.12	1.120	70.0	0.351	0.668	123.6	342.9	0.433D	0.902	3.41	1.751	85.6	273.9	11.7	0.514
6.29	13.20		+/+	16.0	0.0	45.1	0.0	1.253	1.419	306.9	10.0	13.915	0.359	7.168	169.1	5.8	134.2	98.1	2.217
44930.0	45143.9	0.285	17.0	20.3	4.00	0.880	75.8	0.334	0.800	147.0	453.7	0.532	1.068	1.27	1.226	108.8	233.0	3.7	0.403
45143.9	45286.0	0.403	216.5	3.7	1.42	1.113	70.2	0.351	0.660	125.5	335.4	0.428D	0.891	3.05	1.746	83.7	279.0	9.7	0.547
6.12	14.17		+/+	16.4	0.0	54.5	0.0	1.291	1.419	314.7	-0.1	13.877	0.364	6.991	176.3	4.0	139.5	99.8	2.180
44940.0	45150.0	0.276	25.2	22.7	3.69	0.876	76.4	0.333	0.793	148.7	454.8	0.529	1.058	0.54	1.223	108.9	241.9	1.6	0.403
45150.0	45286.0	0.403	224.7	5.3	2.03	1.105	70.3	0.354	0.651	127.5	327.8	0.421D	0.881	2.37	1.740	81.8	283.5	7.0	0.582
5.97	15.17		+/+	17.6	0.0	64.0	0.0	1.329	1.419	322.6	-12.2	14.007	0.364	6.555	167.3	2.6	144.4	101.2	2.023
44950.0	45156.5	0.272	34.0	24.5	3.27	0.871	76.7	0.337	0.786	150.1	456.6	0.521	1.051	-0.20	1.220	109.2	251.4	-0.6	0.410
45156.5	45286.0	0.410	233.3	10.4	4.10	1.095	70.4	0.358	0.640	129.9	319.8	0.411D	0.870	0.23	1.733	79.7	287.9	0.6	0.620
5.89	16.28		+/+	21.1	0.0	74.5	0.0	1.368	1.419	329.4	-31.3	14.675	0.353	5.473	148.2	3.1	149.4	102.8	1.579
44960.0	45165.4	0.291	45.5	25.2	2.66	0.864	75.3	0.362	0.777	150.0	460.5	0.496	1.058	-1.00	1.216	110.8	263.6	-2.6	0.443
45165.4	45286.0	0.442	243.8	-21.7	-9.26	1.079	70.2	0.369	0.625	133.4	309.0	0.394D	0.856	13.51	1.722	76.9	297.1	30.7	0.767
6.23	20.61	294.4	+/-	27.1	1.3	88.7	0.0	1.418	1.419	332.8	44.0	16.548	0.302	4.472	133.5	5.7	143.2	108.3	0.987
44970.0	45168.6	0.255	51.0	26.0	2.18	0.860	77.9	0.339	0.773	153.9	459.2	0.510	1.035	-1.63	1.213	109.5	269.2	-4.5	0.416
45168.6	45286.0	0.416	249.3	-10.6	-4.34	1.073	70.2	0.374	0.619	134.7	305.3	0.388D	0.851	8.55	1.717	75.9	296.6	19.7	0.735
5.60	19.65		+/-	20.6	0.0	93.8	0.0	1.435	1.419	346.9	17.1	14.845	0.343	5.580	161.2	6.4	150.9	106.1	1.569
44980.0	45173.8	0.241	58.2	25.9	1.60	0.854	79.0	0.336	0.767	156.5	460.0	0.509	1.025	-2.23	1.210	109.4	277.0	-6.2	0.414
45173.8	45286.0	0.414	256.2	-5.6	-2.32	1.062	70.0	0.383	0.610	136.9	299.2	0.376D	0.843	6.49	1.710	74.3	298.8	14.3	0.753
5.37	20.20		+/-	20.7	0.0	102.1	0.0	1.461	1.419	356.8	-1.6	14.770	0.346	5.572	173.8	8.0	155.8	105.3	1.583

DEPART	PASS	SPEED	R A	DECL	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
PASS	ARRIVE	SPEED	R A	DECL	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
DV1	DV2	DELVC	LEG	KAPPA	DELK	RAS	DECLS	COIST1	COIST2	RAP	DECLP	VP	-A	E	INCL	LAM1	LAM2	ETA	PERIC
44990.0	45179.4	0.232	65.7	25.1	0.98	0.847	79.9	0.338	0.761	158.9	461.3	0.504	1.018	-2.77	1.207	109.5	285.3	-7.6	0.417
45179.4	45286.0	0.417	263.4	-3.7	-1.57	1.049	69.9	0.395	0.598	139.5	292.7	0.362D	0.834	5.67	1.701	72.5	301.6	11.8	0.786
5.23	21.17		+/-	22.2	0.0	111.2	0.0	1.489	1.419	5.3	-10.1	15.094	0.340	5.206	168.4	9.6	159.5	105.6	1.431
45000.0	45185.2	0.226	72.8	23.7	0.33	0.840	80.8	0.342	0.755	161.2	462.7	0.497	1.012	-3.21	1.204	109.8	293.8	-8.6	0.423
45185.2	45286.0	0.423	270.5	-2.8	-1.70	1.033	69.7	0.439	0.586	142.2	286.1	0.346D	0.825	5.24	1.690	70.6	304.4	10.2	0.824
5.12	22.28		+/-	23.9	0.0	120.5	0.0	1.516	1.419	13.6	-14.3	15.530	0.331	4.837	164.5	10.9	162.7	106.4	1.272
45010.0	45190.9	0.220	79.4	22.0	-0.30	0.832	81.7	0.346	0.749	163.6	464.2	0.490	1.008	-3.54	1.201	110.1	302.1	-9.3	0.429
45190.9	45286.0	0.429	277.3	-2.2	-0.99	1.016	69.5	0.425	0.573	145.0	279.7	0.329D	0.817	4.97	1.679	68.6	307.1	9.0	0.863
5.04	23.43		+/-	25.7	0.0	129.7	0.0	1.541	1.419	21.4	-16.2	16.018	0.322	4.502	162.7	12.0	165.5	107.6	1.127
45020.0	45196.6	0.217	85.5	19.9	-0.93	0.823	82.6	0.352	0.743	166.0	465.8	0.481	1.005	-3.76	1.197	110.6	310.6	-9.7	0.436
45196.6	45286.0	0.436	284.0	-1.9	-0.87	0.996	69.3	0.444	0.559	147.9	273.2	0.311D	0.807	4.78	1.666	66.6	309.8	8.1	0.904
4.99	24.64	264.3	+/-	27.6	1.2	139.0	0.0	1.564	1.419	29.6	-16.5	16.403	0.311	4.377	162.3	12.8	168.2	108.6	0.994
45030.0	45146.0	0.338	355.7	17.2	6.55	0.933	107.7	0.330	0.872	229.1	437.8	0.584	1.160A	-7.05	1.268	106.8	242.8	-21.7	0.403
45146.0	45286.0	0.403	219.3	4.1	1.58	1.110	70.3	0.352	0.657	126.1	332.8	0.426D	0.888	2.86	1.744	83.0	280.6	8.9	0.559
7.14	14.51	986.2	+/+	34.6	4.7	57.7	0.0	1.304	1.419	334.1	-47.3	15.627	0.365	3.880	130.7	22.3	141.2	85.7	0.862
45030.0	45202.3	0.215	91.0	17.8	-1.51	0.814	83.7	0.359	0.737	168.5	467.3	0.473	1.002	-3.85	1.194	111.0	318.9	-9.7	0.444
45202.3	45286.0	0.444	290.2	-1.6	-0.79	0.973	69.2	0.464	0.545	150.8	267.0	0.292D	0.798	4.62	1.652	64.6	312.5	7.3	0.945
4.97	25.87	911.8	+/-	29.6	3.9	148.2	0.0	1.586	1.419	38.2	-15.7	16.588	0.300	4.499	163.0	13.4	170.6	109.2	0.873
45050.0	45178.1	0.281	30.9	16.1	1.10	0.874	104.3	0.339	0.804	212.5	452.4	0.532	1.076A	-3.81	1.236	108.9	287.4	-10.8	0.416
45178.1	45286.0	0.416	261.7	-4.0	-1.69	1.052	69.9	0.392	0.601	138.9	294.2	0.365D	0.836	5.81	1.703	72.9	300.9	12.2	0.778
6.04	20.93		+/-	26.3	0.0	109.1	0.0	1.483	1.419	6.5	-14.8	15.624	0.342	4.398	163.3	10.9	158.7	102.2	1.162
45060.0	45193.2	0.261	50.2	16.8	-0.50	0.845	102.1	0.350	0.776	204.6	458.9	0.504	1.048A	-3.23	1.221	110.1	308.4	-8.6	0.432
45193.2	45286.0	0.432	280.0	-2.0	-0.94	1.008	69.4	0.432	0.568	146.1	277.1	0.322D	0.813	4.89	1.674	67.8	308.2	8.6	0.879
5.70	23.90	493.1	+/-	29.0	2.2	133.4	0.0	1.550	1.419	26.5	-13.0	16.296	0.318	4.307	165.8	9.9	166.6	106.4	0.949
									ARRIVAL DATE = 2445288.0										
44790.0	45076.1	0.631	256.8	-22.6	0.26	0.924	51.5	0.631	0.898	137.9	473.8	0.332	1.465	3.63	1.281	127.7	115.4	4.6	0.797
45076.1	45288.0	0.797	107.6	2.2	1.95	1.181	50.1	0.641	0.736	129.0	452.4	0.264	1.207	5.74	1.769	123.4	152.2	10.7	0.798
13.98	21.52		+/+	8.2	0.0	307.1	0.0	0.799	1.430	202.6	17.0	25.479	0.093	14.042	162.6	12.5	13.1	103.8	1.217
44800.0	45080.0	0.572	268.1	-22.1	1.01	0.919	55.4	0.580	0.891	136.1	468.7	0.375	1.407	4.26	1.277	124.0	124.0	6.3	0.721
45080.0	45288.0	0.722	115.5	2.3	1.71	1.177	53.9	0.589	0.732	125.5	442.8	0.301	1.162	5.43	1.767	118.5	160.0	12.3	0.689
12.49	18.31		+/+	9.4	0.0	313.2	0.0	0.830	1.430	211.8	25.3	23.320	0.114	12.257	154.3	11.1	19.6	100.3	1.281
44810.0	45084.0	0.523	278.9	-20.8	1.63	0.915	58.7	0.536	0.884	135.1	464.4	0.411	1.357	4.69	1.273	120.9	132.3	7.8	0.659
45084.0	45288.0	0.660	123.2	2.3	1.54	1.173	57.1	0.544	0.728	122.8	433.9	0.332	1.123	5.18	1.765	114.4	168.3	14.0	0.601
11.28	15.73		+/+	10.6	0.0	319.5	0.0	0.860	1.430	220.8	30.9	21.559	0.136	10.781	148.6	10.6	27.3	97.5	1.332
44820.0	45088.0	0.482	289.1	-18.7	2.15	0.911	61.4	0.498	0.877	134.7	460.8	0.440	1.313	4.96	1.268	118.3	140.5	9.1	0.608
45088.0	45288.0	0.608	130.7	2.3	1.41	1.170	59.7	0.505	0.724	120.8	425.4	0.358	1.090	4.97	1.763	110.8	177.3	15.6	0.530
10.30	13.67		+/+	11.9	0.0	325.9	0.0	0.892	1.430	229.6	34.7	20.102	0.160	9.656	144.7	10.6	35.8	95.3	1.386
44830.0	45092.2	0.448	298.6	-16.0	2.59	0.908	63.8	0.466	0.870	134.7	457.9	0.465	1.274	5.09	1.264	116.2	148.6	10.3	0.565
45092.2	45288.0	0.566	138.1	2.4	1.31	1.166	61.8	0.472	0.720	119.4	417.3	0.380	1.060	4.79	1.761	107.6	186.9	17.1	0.476
9.50	12.09		+/+	13.0	0.0	332.6	0.0	0.924	1.430	238.1	36.9	18.878	0.185	8.806	142.4	11.0	45.0	93.6	1.446
44840.0	45096.5	0.418	307.6	-12.9	2.98	0.905	65.9	0.438	0.863	135.1	455.5	0.485	1.240	5.11	1.260	114.5	156.6	11.1	0.530
45096.5	45288.0	0.530	145.5	2.4	1.24	1.162	63.6	0.445	0.716	118.4	409.5	0.397	1.034	4.62	1.759	104.7	197.3	18.3	0.435
8.83	10.93		+/+	14.0	0.0	339.4	0.0	0.957	1.430	246.3	38.0	17.837	0.211	8.187	141.2	11.5	54.9	92.4	1.517
44850.0	45101.0	0.393	316.1	-9.3	3.33	0.902	67.7	0.414	0.856	135.9	453.6	0.501	1.210	5.02	1.256	113.0	164.6	11.7	0.500
45101.0	45288.0	0.500	152.9	2.5	1.20	1.158	65.1	0.421	0.711	117.8	401.8	0.412	1.011	4.46	1.756	102.1	208.2	19.1	0.408
8.28	10.15		+/+	14.8	0.0	346.5	0.0	0.991	1.430	254.3	38.0	16.942	0.237	7.756	141.1	11.8	65.2	91.7	1.603
44860.0	45105.6	0.371	324.1	-5.6	3.62	0.900	69.3	0.394	0.849	136.9	452.2	0.514	1.183	4.83	1.252	111.8	172.7	11.9	0.474
45105.6	45288.0	0.474	160.3	2.6	1.17	1.154	66.4	0.401	0.707	117.6	394.3	0.423	0.990	4.31	1.754	99.6	219.3	19.3	0.392
7.82	9.70		+/+	15.4	0.0	353.8	0.0	1.026	1.430	262.0	37.0	16.165	0.263	7.477	142.1	12.0	75.6	91.5	1.704
44870.0	45110.4	0.352	331.9	-1.6	3.86	0.897	70.7	0.377	0.842	138.0	451.2	0.525	1.159	4.54	1.248	110.8	180.8	11.8	0.453
45110.4	45288.0	0.453	167.9	2.7	1.16	1.150	67.5	0.384	0.702	117.7	386.8	0.432	0.972	4.16	1.751	97.4	230.2	19.0	0.387
7.42	9.55		+/+	15.7	0.0	1.4	0.0	1.061	1.430	269.4	35.0	15.489	0.288	7.318	144.1	11.8	85.8	91.6	1.822
44880.0	45115.4	0.336	339.3	2.4	4.06	0.895	71.9	0.363	0.835	139.4	450.7	0.532	1.138	4.17	1.245	110.0	189.1	11.3	0.436
45115.4	45288.0	0.436	175.6	2.9	1.17	1.145	68.4	0.370	0.697	118.1	379.3	0.439	0.955	3.99	1.748	95.2	240.4	18.1	0.391
7.09	9.65		+/+	15.8	0.0	9.3	0.0	1.098	1.430	276.7	31.9	14.907	0.312	7.273	147.2	11.3	95.5	92.2	1.956
44890.0	45120.6	0.321	346.6	6.5	4.19	0.893	73.1	0.351	0.828	140.9	450.5	0.537	1.119	3.72	1.241	109.4	197.4	10.4	0.421
45120.6	45288.0	0.421	183.3	3.1	1.21	1.140	69.2	0.359	0.691	118.8	371.9	0.443	0.940	3.82	1.745	93.1	249.8	16.8	0.402
6.80	9.96		+/+	15.8	0.0	17.5	0.0	1.135	1.430	283.9	27.5	14.410	0.333	7.294	151.6	10.4	104.5	93.2	2.098
44900.0	45125.9	0.308	353.9	10.3	4.25	0.890	74.1	0.342	0.821	142.5	450.6	0.541	1.102	3.18	1.237	108.9	205.8	9.1	0.410
45125.9	45288.0	0.410	191.2	3.3	1.28	1.135	69.8	0.351	0.685	119.8	364.4	0.445	0.926	3.62	1.741	91.1	258.1	15.3	0.418
6.55	10.44		+/+	15.6	0.0	25.9	0.0	1.172	1.430	291.0	21.6	14.002	0.352	7.346	157.4	9.1	112.6	94.5	2.236
44910.0	45131.4	0.296	1.2	14.0	4.24	0.887	75.0	0.334	0.814	144.2	450.9	0.542	1.087	2.59	1.234	108.6	214.4	7.6	0.401
45131.4	45288.0	0.401	199.2	3.7	1.40	1.130	70.3	0.344	0.679	121.0	357.0	0.445D	0.913	3.39	1.737	89.2	265.5	13.5	0.439
6.32	11.04		+/+	15.6	0.0	34.5	0.0	1.209	1.430	298.2	14.3	13.691	0.368	7.370	166.6	7.6	119.9	96.1	2.346
44920.0	45136.9	0.284	8.6	17.4	4.13	0.884	75.8	0.328	0.808	146.0	451.5	0.542	1.073	1.93	1.230	108.3	222.9	5.7	0.394
45136.9	45288.0	0.394	207.1	4.3	1.58	1.124	70.7	0.340	0.672	122.4	349.6	0.444D	0.901	3.10	1.733	87.4	271.9	11.6	0.464
6.11	11.74		+/+	15.8	0.0	43.3	0.0	1.246	1.430	305.5	5.4	13.485	0.381	7.281	172.6	5.7	126.4	97.8	2.393
44930.0	45142.6	0.273	16.1	20.3	3.94	0.881	76.6	0.324	0.801	147.8	452.4	0.541	1.061	1.24	1.227	108.2	231.5	3.7	0.390
45142.6	45288.0	0.390	215.2	5.1	1.88	1.118	70.9	0.338	0.665	124.1	342.2	0.440D	0.889	2.70	1.728	85.5	277.6	9.5	0.490
5.91	12.52		+/+	16.4	0.0	52.4	0.0	1.283	1.430	313.0	-4.8	13.412	0.389	7.017	173.4	3.8	132.3	99.4	2.342
44940.0	45148.4	0.263	23.8	22.8	3.66	0.877	77.3	0.322	0.794	149.7	453.4	0.539	1.050	0.52	1.224	108.1	240.2	1.6	0.388
45148.4	45288.0	0.388	223.1	6.5	2.39	1.111	71.1	0.338	0.657	125.9	334.9	0.435D	0.879	2.08	1.723	83.7	282.7	6.9	0.519
5.73	13.34		+/+	17.7	0.0	61.5	0.0	1.319	1.430	320.5	-16.2	13.495	0.393	6.503	163.3	2.1	137.6	100.6	2.165

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44950.0	45154.4	0.254	31.9	24.7	3.28	0.873	78.0	0.322	0.787	151.6	454.7	0.534	1.041	-0.19	1.220	108.2	249.0	-0.6	0.389
45154.4	45288.0	0.390	231.2	9.4	3.49	1.103	71.3	0.340	0.648	128.0	327.4	0.428D	0.869	0.89	1.717	81.9	287.4	2.7	0.550
5.59	14.24		+/+	20.3	0.0	71.1	0.0	1.355	1.430	327.7	-29.3	13.869	0.390	5.666	150.3	2.2	142.7	101.7	1.821
44970.0	45170.5	0.273	53.3	25.7	2.06	0.859	76.5	0.355	0.771	152.4	460.9	0.498	1.045	-1.70	1.213	110.5	271.5	-4.4	0.435
45170.5	45288.0	0.435	250.7	-24.9	-10.34	1.077	71.2	0.356	0.622	134.3	307.8	0.400D	0.843	14.45	1.698	77.0	302.5	33.5	0.748
5.91	20.03	448.9	+/-	28.5	2.0	96.9	0.0	1.445	1.430	337.9	44.5	16.371	0.313	4.356	132.1	7.0	140.6	110.2	0.957
44980.0	45173.1	0.236	57.2	26.1	1.66	0.855	79.5	0.332	0.767	157.1	459.5	0.513	1.022	-2.21	1.211	109.1	276.1	-6.2	0.408
45173.1	45288.0	0.407	255.4	-16.1	-6.38	1.072	71.2	0.360	0.617	135.4	304.9	0.395D	0.839	10.45	1.694	76.2	301.9	24.7	0.714
5.28	19.05		+/-	22.6	0.0	101.0	0.0	1.458	1.430	350.4	25.5	14.797	0.357	5.104	151.8	7.9	146.9	108.4	1.465
44990.0	45176.9	0.215	61.5	25.6	1.20	0.849	81.4	0.323	0.763	161.1	459.5	0.516	1.009	-2.66	1.208	108.6	282.2	-7.7	0.398
45176.9	45288.0	0.398	260.8	-10.2	-4.03	1.064	71.2	0.367	0.610	137.1	300.4	0.386D	0.834	8.04	1.688	75.1	303.2	18.6	0.715
4.96	19.08		+/-	21.3	0.0	107.2	0.0	1.477	1.430	0.5	6.9	14.295	0.373	5.419	168.5	9.1	151.9	106.6	1.650
45000.0	45181.5	0.202	65.9	24.5	0.70	0.843	83.0	0.321	0.758	164.7	460.3	0.514	1.002	-3.03	1.206	108.5	289.1	-8.8	0.397
45181.5	45288.0	0.398	266.8	-7.1	-2.85	1.053	71.1	0.375	0.601	139.2	295.1	0.375D	0.827	6.77	1.681	73.7	305.3	15.0	0.734
4.78	19.63		+/-	22.2	0.0	114.6	0.0	1.499	1.430	8.5	-4.2	14.378	0.375	5.203	170.9	10.3	155.7	106.0	1.576
45010.0	45186.3	0.194	69.7	23.0	0.20	0.837	84.5	0.323	0.753	168.2	461.3	0.510	0.997	-3.31	1.203	108.7	296.1	-9.5	0.400
45186.3	45288.0	0.400	272.7	-5.4	-2.21	1.041	71.0	0.386	0.591	141.4	289.7	0.363D	0.820	6.05	1.673	72.2	307.6	12.8	0.759
4.66	20.37		+/-	23.6	0.0	122.2	0.0	1.521	1.430	15.7	-9.9	14.650	0.371	4.889	167.5	11.3	158.8	106.3	1.442
45020.0	45190.8	0.188	72.2	21.2	-0.27	0.830	86.2	0.325	0.749	172.0	462.3	0.506	0.993	-3.48	1.201	108.9	302.9	-9.9	0.403
45190.8	45288.0	0.403	278.2	-4.4	-1.84	1.029	70.9	0.397	0.582	143.6	284.5	0.351D	0.813	5.60	1.665	70.7	309.8	11.3	0.786
4.58	21.16		+/-	25.1	0.0	129.6	0.0	1.541	1.430	22.1	-12.4	14.977	0.364	4.600	165.5	11.9	161.5	107.1	1.312
45030.0	45150.5	0.310	359.6	15.7	5.04	0.919	106.2	0.320	0.852	224.4	440.2	0.579	1.124A	-5.77	1.258	106.6	249.1	-18.2	0.388
45150.5	45288.0	0.388	226.0	7.3	2.69	1.108	71.2	0.339	0.654	126.6	332.2	0.432D	0.875	1.75	1.721	83.1	284.4	5.7	0.530
6.58	13.66	618.1	+/+	34.2	2.6	65.0	0.0	1.332	1.430	335.5	-48.1	15.286	0.393	3.670	131.1	18.7	139.5	89.6	0.944
45030.0	45194.8	0.186	72.7	19.6	-0.66	0.824	88.2	0.328	0.747	176.4	463.1	0.501	0.992	-3.52	1.200	109.1	308.9	-9.9	0.407
45194.8	45288.0	0.407	282.8	-3.8	-1.63	1.016	70.8	0.408	0.573	145.6	280.1	0.339D	0.807	5.31	1.657	69.4	311.8	10.2	0.810
4.55	21.88		+/-	26.5	0.0	136.0	0.0	1.557	1.430	27.4	-13.2	15.303	0.358	4.357	165.0	12.2	163.6	108.1	1.202
45040.0	45197.3	0.189	69.3	18.2	-0.88	0.821	91.2	0.331	0.747	182.4	463.2	0.500	0.994A	-3.45	1.200	109.2	312.9	-9.6	0.409
45197.3	45288.0	0.409	285.7	-3.5	-1.52	1.008	70.8	0.416	0.567	146.9	277.3	0.331D	0.803	5.16	1.651	68.6	313.0	9.6	0.826
4.59	22.35		+/-	27.6	0.0	140.1	0.0	1.567	1.430	30.8	-12.7	15.547	0.354	4.187	165.6	12.0	164.9	108.9	1.128
45050.0	45170.8	0.320	23.7	16.0	2.13	0.897	107.2	0.351	0.832	220.3	448.5	0.540	1.124A	-4.42	1.251	109.2	277.6	-12.3	0.429
45170.8	45288.0	0.429	251.5	-23.3	-9.58	1.076	71.2	0.357	0.621	134.4	307.5	0.400D	0.843	13.68	1.697	76.9	302.2	31.9	0.739
6.78	19.79		+/-	27.2	0.0	97.4	0.0	1.447	1.430	346.9	23.0	16.220	0.322	4.260	150.0	12.3	141.7	108.8	1.050

ARRIVAL DATE = 2445290.0

44800.0	45081.0	0.598	267.6	-21.8	1.29	0.919	53.8	0.602	0.891	137.1	471.3	0.355	1.427	4.50	1.277	125.7	124.4	6.2	0.756
45081.0	45290.0	0.756	116.2	3.1	2.56	1.176	52.2	0.613	0.731	127.4	449.0	0.283	1.179	6.04	1.749	121.2	161.3	11.8	0.770
13.14	20.70		+/+	8.7	0.0	314.8	0.0	0.838	1.439	212.0	20.4	24.290	0.104	13.162	159.0	12.1	15.8	102.0	1.261
44810.0	45084.9	0.543	278.5	-20.6	1.87	0.915	57.4	0.553	0.884	135.8	466.5	0.395	1.373	4.90	1.272	122.2	132.8	7.7	0.686
45084.9	45290.0	0.686	123.9	3.2	2.27	1.173	55.8	0.563	0.727	124.2	439.8	0.318	1.136	5.65	1.747	116.7	168.9	13.2	0.671
11.77	17.77		+/+	9.9	0.0	320.9	0.0	0.868	1.439	221.1	26.9	22.282	0.126	11.575	152.4	11.2	22.4	98.8	1.331
44820.0	45088.8	0.497	288.8	-18.5	2.35	0.911	60.5	0.512	0.876	135.1	462.5	0.428	1.325	5.13	1.268	119.3	140.9	9.1	0.628
45088.8	45290.0	0.628	131.4	3.3	2.05	1.169	58.7	0.520	0.723	121.9	431.1	0.347	1.099	5.33	1.745	112.8	176.9	14.7	0.590
10.67	15.42		+/+	11.1	0.0	327.2	0.0	0.898	1.439	229.9	31.2	20.629	0.150	10.317	148.0	11.0	29.9	96.3	1.397
44830.0	45092.9	0.459	298.5	-15.9	2.76	0.908	63.1	0.476	0.869	134.9	459.2	0.456	1.283	5.23	1.264	117.0	149.0	10.2	0.581
45092.9	45290.0	0.581	138.8	3.3	1.89	1.165	61.1	0.484	0.719	120.1	422.9	0.371	1.067	5.05	1.743	109.4	185.5	16.0	0.526
9.77	13.54		+/+	12.3	0.0	333.7	0.0	0.930	1.439	238.4	33.8	19.248	0.176	9.365	145.3	11.2	38.0	94.4	1.470
44840.0	45097.1	0.427	307.5	-12.8	3.11	0.905	65.4	0.445	0.862	135.2	456.5	0.478	1.247	5.21	1.260	115.0	157.0	11.1	0.541
45097.1	45290.0	0.541	146.1	3.4	1.77	1.162	63.1	0.453	0.716	118.9	415.0	0.392	1.039	4.81	1.741	106.4	194.7	17.1	0.475
9.02	12.08		+/+	13.3	0.0	340.3	0.0	0.962	1.439	246.6	35.1	18.078	0.203	8.665	144.0	11.5	46.7	93.0	1.554
44850.0	45101.4	0.399	316.1	-9.3	3.41	0.902	67.3	0.419	0.856	135.9	454.3	0.497	1.214	5.08	1.256	113.4	164.9	11.6	0.507
45101.4	45290.0	0.507	153.4	3.5	1.68	1.158	64.8	0.426	0.711	118.1	407.4	0.408	1.015	4.59	1.739	103.7	204.4	18.0	0.437
8.41	10.98		+/+	14.1	0.0	347.2	0.0	0.994	1.439	254.5	35.2	17.076	0.230	8.170	143.8	11.8	55.9	92.2	1.652
44860.0	45105.9	0.375	324.2	-5.5	3.67	0.900	69.1	0.397	0.849	136.8	452.7	0.512	1.186	4.87	1.252	112.0	172.9	11.9	0.479
45105.9	45290.0	0.479	160.7	3.6	1.62	1.154	66.2	0.404	0.707	117.6	399.9	0.421	0.993	4.37	1.736	101.2	214.6	18.4	0.411
7.89	10.22		+/+	14.7	0.0	354.3	0.0	1.028	1.439	262.1	34.2	16.209	0.258	7.843	144.7	11.9	65.4	91.8	1.768
44870.0	45110.6	0.354	331.9	-1.6	3.89	0.897	70.6	0.378	0.842	138.0	451.4	0.524	1.160	4.56	1.248	110.9	180.9	11.8	0.455
45110.6	45290.0	0.455	168.1	3.7	1.59	1.150	67.4	0.385	0.703	117.6	392.4	0.432	0.973	4.17	1.734	98.9	224.9	18.4	0.394
7.45	9.75		+/+	15.0	0.0	1.6	0.0	1.062	1.439	269.4	32.1	15.456	0.286	7.646	146.8	11.8	75.1	91.9	1.902
44880.0	45115.4	0.335	339.3	2.4	4.05	0.895	72.0	0.362	0.835	139.4	450.6	0.532	1.138	4.17	1.245	110.0	189.0	11.3	0.435
45115.4	45290.0	0.435	175.6	3.9	1.59	1.146	68.5	0.369	0.698	117.8	385.1	0.440	0.956	3.95	1.731	96.7	235.0	17.8	0.387
7.08	9.55		+/+	15.2	0.0	9.2	0.0	1.097	1.439	276.5	28.8	14.805	0.313	7.563	150.0	11.3	84.7	92.4	2.052
44890.0	45120.4	0.319	346.6	6.4	4.16	0.893	73.2	0.349	0.828	141.0	450.2	0.539	1.117	3.70	1.241	109.3	197.2	10.4	0.419
45120.4	45290.0	0.419	183.2	4.1	1.62	1.142	69.3	0.356	0.693	118.3	377.7	0.446	0.940	3.73	1.728	94.6	244.7	16.8	0.388
6.76	9.57		+/+	15.2	0.0	17.1	0.0	1.133	1.439	283.5	24.2	14.250	0.338	7.548	154.6	10.4	93.9	93.3	2.212
44900.0	45125.5	0.304	353.7	10.3	4.21	0.890	74.3	0.338	0.821	142.7	450.1	0.544	1.099	3.16	1.237	108.7	205.4	9.2	0.405
45125.5	45290.0	0.405	190.8	4.4	1.68	1.137	70.0	0.346	0.687	119.1	370.4	0.450	0.925	3.49	1.724	92.7	253.5	15.4	0.395
6.47	9.78		+/+	15.2	0.0	25.2	0.0	1.169	1.439	290.3	18.1	13.788	0.361	7.549	160.6	9.2	102.5	94.6	2.363
44910.0	45130.8	0.290	0.9	14.0	4.18	0.888	75.3	0.329	0.815	144.5	450.3	0.546	1.083	2.56	1.234	108.3	213.7	7.6	0.394
45130.8	45290.0	0.395	198.6	4.8	1.78	1.132	70.6	0.338	0.682	120.2	363.1	0.451	0.912	3.22	1.721	90.8	261.6	13.7	0.408
6.22	10.14		+/+	15.3	0.0	33.6	0.0	1.205	1.439	297.3	10.4	13.433	0.380	7.518	167.8	7.6	110.4	96.1	2.480
44920.0	45136.2	0.277	8.1	17.4	4.08	0.885	76.3	0.322	0.808	146.4	450.7	0.547	1.069	1.90	1.230	107.9	222.1	5.8	0.386
45136.2	45290.0	0.386	206.4	5.4	1.95	1.127	71.1	0.332	0.675	121.5	355.9	0.451D	0.899	2.89	1.717	89.0	268.8	11.8	0.425
5.98	10.62		+/+	15.6	0.0	42.1	0.0	1.241	1.439	304.4	1.4	13.190	0.397	7.358	174.2	5.8	117.6	97.7	2.524

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44930.0	45141.6	0.265	15.3	20.4	3.90	0.882	77.2	0.317	0.801	148.5	451.3	0.548	1.055	1.22	1.227	107.7	230.4	3.7	0.380
45141.6	45290.0	0.380	214.1	6.2	2.21	1.122	71.5	0.328	0.669	123.0	348.7	0.449D	0.888	2.49	1.713	87.2	275.2	9.6	0.444
5.76	11.19		+/+	16.4	0.0	50.7	0.0	1.276	1.439	311.5	-8.6	13.072	0.410	7.006	170.0	3.8	124.0	99.1	2.462
44940.0	45147.1	0.253	22.7	22.9	3.64	0.878	78.1	0.313	0.795	150.6	452.2	0.546	1.044	0.51	1.224	107.6	238.8	1.6	0.377
45147.1	45290.0	0.377	221.9	7.4	2.64	1.115	71.8	0.326	0.662	124.6	341.6	0.446D	0.877	1.92	1.708	85.5	280.9	7.0	0.467
5.56	11.84		+/+	17.8	0.0	59.5	0.0	1.311	1.439	318.8	-19.2	13.111	0.418	6.453	160.2	1.8	129.9	100.2	2.278
44950.0	45152.8	0.242	30.2	24.8	3.29	0.874	78.9	0.311	0.789	152.8	453.3	0.543	1.034	-0.19	1.221	107.5	247.2	-0.6	0.375
45152.8	45290.0	0.376	229.6	9.5	3.38	1.109	72.0	0.326	0.654	126.5	334.5	0.441D	0.867	1.04	1.703	83.8	286.0	3.6	0.492
5.38	12.55		+/+	20.2	0.0	68.5	0.0	1.346	1.439	325.8	-30.1	13.357	0.420	5.694	149.5	1.5	135.3	101.0	1.971
44960.0	45159.1	0.236	38.4	26.0	2.86	0.868	79.3	0.314	0.782	154.6	455.0	0.536	1.027	-0.88	1.217	107.8	256.3	-2.7	0.381
45159.1	45290.0	0.381	237.8	14.3	5.16	1.100	72.1	0.328	0.645	128.7	326.7	0.433D	0.857	-0.88	1.696	81.9	291.2	-2.8	0.523
5.29	13.45		+/+	25.0	0.0	78.6	0.0	1.382	1.439	331.7	-42.8	14.144	0.407	4.627	136.6	3.5	140.5	102.3	1.478
44980.0	45175.3	0.254	60.4	25.6	1.48	0.853	78.0	0.347	0.766	155.3	461.2	0.500	1.031	-2.30	1.210	110.1	278.8	-6.1	0.427
45175.3	45290.0	0.427	257.2	-27.5	-11.13	1.074	72.2	0.345	0.619	135.2	307.0	0.406D	0.832	15.05	1.677	77.2	307.4	35.9	0.724
5.58	19.33	529.1	+/-	29.7	2.4	104.6	0.0	1.469	1.439	342.9	44.4	16.189	0.324	4.238	131.1	8.4	138.1	112.0	0.942
44990.0	45177.4	0.218	62.2	25.6	1.16	0.849	81.2	0.326	0.762	160.7	459.8	0.514	1.011	-2.67	1.208	108.8	282.7	-7.6	0.401
45177.4	45290.0	0.401	261.1	-20.6	-7.97	1.070	72.2	0.348	0.615	136.1	304.6	0.401D	0.829	11.84	1.674	76.6	306.7	28.8	0.693
5.00	18.42		+/-	24.6	0.0	107.9	0.0	1.479	1.439	353.4	30.9	14.839	0.368	4.687	145.2	9.2	143.2	110.8	1.357
45000.0	45180.0	0.194	62.8	24.8	0.84	0.845	83.8	0.314	0.760	166.1	459.4	0.521	0.998	-2.98	1.206	108.1	287.2	-8.8	0.388
45180.0	45290.0	0.388	265.1	-15.4	-5.83	1.065	72.2	0.352	0.610	137.3	301.5	0.396D	0.825	9.64	1.670	75.8	307.3	23.4	0.683
4.67	18.14		+/-	22.5	0.0	112.2	0.0	1.492	1.439	2.6	16.7	14.098	0.393	5.121	159.1	10.1	147.5	108.8	1.618
45010.0	45183.0	0.181	62.1	23.4	0.52	0.840	86.2	0.310	0.757	171.5	459.4	0.523	0.992	-3.20	1.205	107.8	291.9	-9.6	0.383
45183.0	45290.0	0.383	269.1	-12.0	-4.52	1.058	72.1	0.357	0.605	138.7	298.1	0.389D	0.821	8.26	1.666	74.9	308.5	19.7	0.687
4.48	18.25		+/-	22.4	0.0	117.0	0.0	1.506	1.439	9.4	5.9	13.901	0.403	5.143	167.5	10.9	150.7	107.5	1.670
45020.0	45185.6	0.175	59.0	21.6	0.25	0.837	88.9	0.308	0.756	177.6	459.5	0.523	0.989	-3.33	1.205	107.8	295.9	-10.1	0.382
45185.6	45290.0	0.382	272.4	-10.0	-3.80	1.052	72.1	0.362	0.600	139.9	295.2	0.383D	0.817	7.49	1.662	74.2	309.7	17.4	0.695
4.41	18.49		+/-	23.1	0.0	121.1	0.0	1.518	1.439	14.2	-0.1	13.930	0.406	4.995	169.7	11.3	153.0	106.9	1.623
45030.0	45155.8	0.281	4.3	15.0	3.84	0.903	104.4	0.310	0.832	218.9	443.1	0.574	1.090A	-4.85	1.248	106.5	256.3	-15.6	0.377
45155.8	45290.0	0.377	233.6	11.3	4.03	1.105	72.1	0.327	0.650	127.5	330.7	0.437D	0.862	0.32	1.700	82.9	288.6	1.1	0.506
6.05	12.96	392.5	+/+	35.0	2.0	73.3	0.0	1.363	1.439	339.0	-50.4	15.036	0.417	3.518	129.4	15.8	137.9	92.7	0.969
45030.0	45186.3	0.180	51.1	19.5	0.18	0.837	92.5	0.308	0.759	185.7	458.7	0.525	0.993A	-3.38	1.207	107.7	297.4	-10.2	0.382
45186.3	45290.0	0.382	273.3	-9.6	-3.65	1.051	72.1	0.363	0.598	140.2	294.4	0.381D	0.816	7.32	1.661	74.0	310.0	16.9	0.698
4.47	18.57		+/-	23.7	0.0	122.2	0.0	1.521	1.439	15.6	-1.5	14.000	0.407	4.869	169.7	11.3	153.6	106.6	1.573
45040.0	45180.4	0.222	34.2	16.8	0.76	0.855	99.1	0.314	0.780	201.2	454.7	0.535	1.024A	-3.53	1.220	107.8	290.0	-10.6	0.388
45180.4	45290.0	0.387	265.7	-14.8	-5.62	1.064	72.2	0.352	0.610	137.5	301.1	0.395D	0.824	9.42	1.670	75.7	307.4	22.8	0.683
5.07	18.14		+/-	24.1	0.0	112.8	0.0	1.494	1.439	5.6	9.9	14.258	0.394	4.800	163.6	11.0	147.9	107.0	1.499
45050.0	45175.7	0.293	28.4	16.0	1.40	0.881	105.3	0.342	0.812	215.0	451.1	0.534	1.090A	-3.97	1.241	109.0	284.2	-11.2	0.420
45175.7	45290.0	0.419	258.1	-25.7	-10.25	1.073	72.2	0.345	0.618	135.4	306.5	0.405D	0.831	14.16	1.676	77.0	307.1	34.1	0.714
6.26	19.03	105.6	+/-	28.6	0.5	105.3	0.0	1.471	1.439	351.0	29.2	16.003	0.337	4.118	144.2	11.2	139.4	111.0	1.027
									ARRIVAL DATE = 2445292.0										
44800.0	45082.1	0.629	266.9	-21.5	1.63	0.919	51.8	0.628	0.891	138.4	474.3	0.331	1.451	4.81	1.276	127.7	124.7	6.1	0.796
45082.1	45292.0	0.796	116.8	4.0	3.52	1.176	50.2	0.541	0.730	129.5	455.2	0.262	1.198	6.76	1.734	124.1	162.8	11.3	0.859
13.93	23.32		+/+	8.1	0.0	316.6	0.0	0.846	1.445	212.1	15.1	25.467	0.093	14.112	164.1	13.4	13.0	104.0	1.224
44810.0	45085.9	0.567	278.0	-20.3	2.17	0.915	55.9	0.575	0.884	136.6	468.9	0.376	1.391	5.16	1.272	123.8	133.2	7.6	0.718
45085.9	45292.0	0.718	124.6	4.1	3.07	1.172	54.2	0.585	0.726	125.9	445.6	0.301	1.152	6.19	1.732	119.2	169.9	12.6	0.748
12.37	20.05		+/+	9.2	0.0	322.6	0.0	0.876	1.445	221.3	22.5	23.179	0.115	12.425	156.6	12.1	18.4	100.4	1.313
44820.0	45089.8	0.516	288.5	-18.4	2.61	0.911	59.3	0.529	0.876	135.6	464.5	0.413	1.340	5.35	1.268	120.5	141.4	9.0	0.653
45089.8	45292.0	0.653	132.2	4.1	2.74	1.158	57.4	0.538	0.723	132.2	436.7	0.334	1.112	5.74	1.730	115.0	177.3	13.8	0.657
11.12	17.37		+/+	10.4	0.0	328.7	0.0	0.905	1.445	230.2	27.5	21.307	0.139	11.045	151.6	11.5	24.9	97.5	1.394
44830.0	45093.7	0.474	298.3	-15.8	2.97	0.908	62.2	0.489	0.869	135.2	460.8	0.444	1.294	5.40	1.264	117.9	149.5	10.1	0.600
45093.7	45292.0	0.600	139.5	4.2	2.50	1.165	60.1	0.498	0.719	121.1	428.4	0.361	1.077	5.36	1.728	111.4	185.0	15.0	0.583
10.11	15.21		+/+	11.5	0.0	335.0	0.0	0.936	1.445	238.7	30.5	19.751	0.165	9.979	148.4	11.5	32.0	95.4	1.479
44840.0	45097.8	0.438	307.4	-12.7	3.28	0.905	64.7	0.456	0.862	135.4	457.7	0.469	1.255	5.34	1.260	115.7	157.5	11.0	0.555
45097.8	45292.0	0.555	146.8	4.3	2.31	1.161	62.4	0.464	0.715	119.6	420.4	0.384	1.047	5.04	1.726	108.2	193.2	16.0	0.523
9.28	13.47		+/+	12.5	0.0	341.4	0.0	0.967	1.445	246.9	32.0	18.441	0.192	9.186	146.8	11.7	39.6	93.8	1.574
44850.0	45102.0	0.407	316.0	-9.2	3.54	0.902	66.8	0.427	0.855	135.9	455.3	0.490	1.220	5.18	1.256	113.9	165.4	11.6	0.518
45102.0	45292.0	0.518	154.0	4.4	2.18	1.158	64.3	0.434	0.711	118.5	412.7	0.402	1.020	4.74	1.724	105.3	201.8	16.8	0.476
8.59	12.09		+/+	13.3	0.0	348.1	0.0	0.999	1.445	254.7	32.2	17.324	0.221	8.622	146.5	11.9	47.8	92.8	1.684
44860.0	45106.4	0.381	324.2	-5.5	3.76	0.899	68.7	0.402	0.848	136.8	453.4	0.507	1.190	4.93	1.252	112.4	173.3	11.8	0.486
45106.4	45292.0	0.486	161.3	4.5	2.08	1.154	65.9	0.409	0.707	117.9	405.2	0.418	0.997	4.47	1.722	102.7	210.9	17.3	0.439
8.02	11.05		+/+	13.9	0.0	355.0	0.0	1.031	1.445	262.2	31.3	16.361	0.251	8.236	147.4	11.9	56.3	92.3	1.813
44870.0	45110.9	0.357	331.9	-1.5	3.94	0.897	70.4	0.382	0.842	138.0	451.9	0.521	1.163	4.60	1.248	111.1	181.2	11.7	0.460
45110.9	45292.0	0.460	168.5	4.7	2.02	1.151	67.2	0.388	0.703	117.7	397.8	0.430	0.976	4.21	1.719	100.3	220.4	17.5	0.413
7.53	10.29		+/+	14.4	0.0	2.1	0.0	1.065	1.445	269.4	29.1	15.528	0.280	7.992	149.5	11.8	65.2	92.3	1.959
44880.0	45115.6	0.337	339.3	2.5	4.08	0.895	71.9	0.364	0.835	139.4	450.8	0.531	1.139	4.18	1.245	110.1	189.2	11.2	0.437
45115.6	45292.0	0.438	175.9	4.9	1.99	1.147	68.4	0.370	0.699	117.7	390.5	0.440	0.957	3.95	1.717	98.1	229.9	17.2	0.396
7.12	9.79		+/+	14.6	0.0	9.5	0.0	1.099	1.445	276.4	25.7	14.809	0.309	7.861	152.9	11.2	74.3	92.8	2.123
44890.0	45120.4	0.319	346.6	6.4	4.17	0.893	73.2	0.349	0.828	141.0	450.2	0.539	1.118	3.70	1.241	109.3	197.2	10.4	0.419
45120.4	45292.0	0.419	183.3	5.1	1.99	1.143	69.4	0.356	0.694	118.1	383.3	0.447	0.941	3.68	1.714	96.0	239.4	16.4	0.386
6.76	9.53		+/+	14.7	0.0	17.1	0.0	1.133	1.445	283.2	20.9	14.195	0.337	7.798	157.5	10.4	83.3	93.6	2.294
44900.0	45125.3	0.302	353.7	10.3	4.19	0.890	74.4	0.337	0.822	142.7	449.9	0.545	1.098	3.15	1.237	108.6	205.3	9.2	0.403
45125.3	45292.0	0.404	190.8	5.4	2.04	1.139	70.2	0.343	0.689	118.8	376.1	0.452	0.925	3.40	1.711	94.1	248.4	15.3	0.384
6.44	9.47		+/+	14.8	0.0	24.9	0.0	1.168	1.445	289.9	14.6	13.683	0.364	7.739	163.6	9.2	91.9	94.8	2.452

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44910.0	45130.4	0.287	0.7	14.0	4.15	0.888	75.6	0.327	0.815	144.6	449.9	0.549	1.081	2.54	1.234	108.1	213.4	7.6	0.391
45130.4	45292.0	0.391	198.3	5.8	2.12	1.134	70.8	0.334	0.683	119.6	369.0	0.455	0.912	3.10	1.707	92.2	256.9	13.7	0.388
6.16	9.58		+/+	15.1	0.0	33.0	0.0	1.203	1.445	296.6	6.9	13.282	0.388	7.633	170.3	7.6	100.2	96.3	2.571
44920.0	45135.6	0.273	7.8	17.4	4.05	0.885	76.6	0.319	0.808	146.7	450.2	0.551	1.066	1.88	1.230	107.7	221.5	5.8	0.381
45135.6	45292.0	0.381	205.9	6.4	2.27	1.129	71.4	0.326	0.678	120.8	361.8	0.457	0.899	2.75	1.704	90.4	264.7	11.9	0.397
5.91	9.83		+/+	15.5	0.0	41.2	0.0	1.237	1.445	303.5	-2.2	13.003	0.408	7.402	173.5	5.8	107.9	97.8	2.611
44930.0	45140.9	0.259	14.8	20.4	3.87	0.882	77.6	0.312	0.802	148.9	450.6	0.552	1.052	1.20	1.227	107.4	229.6	3.8	0.373
45140.9	45292.0	0.374	213.4	7.2	2.50	1.124	71.9	0.321	0.672	122.1	354.9	0.456D	0.887	2.34	1.700	88.8	271.7	9.7	0.410
5.66	10.19		+/+	16.5	0.0	49.5	0.0	1.272	1.445	310.4	-11.9	12.847	0.425	6.984	166.9	3.8	114.9	99.0	2.542
44940.0	45146.2	0.246	21.8	22.9	3.62	0.878	78.6	0.307	0.796	151.3	451.3	0.552	1.040	0.50	1.224	107.2	237.7	1.6	0.368
45146.2	45292.0	0.368	220.9	8.3	2.84	1.119	72.2	0.317	0.665	123.6	347.9	0.454D	0.876	1.81	1.696	87.1	278.0	7.2	0.426
5.44	10.65		+/+	18.0	0.0	58.0	0.0	1.305	1.445	317.3	-21.7	12.837	0.437	6.398	157.7	1.6	121.3	99.9	2.359
44950.0	45151.5	0.233	28.7	24.9	3.30	0.874	79.6	0.303	0.789	153.8	452.1	0.550	1.029	-0.18	1.221	107.0	245.6	-0.6	0.365
45151.5	45292.0	0.365	228.2	9.9	3.39	1.113	72.5	0.315	0.659	125.3	341.2	0.451D	0.867	1.10	1.691	85.5	283.6	4.2	0.444
5.24	11.17		+/+	20.3	0.0	66.4	0.0	1.338	1.445	324.1	-31.2	12.989	0.444	5.682	148.4	1.0	127.0	100.5	2.081
44960.0	45157.1	0.222	35.8	26.2	2.92	0.870	80.4	0.302	0.783	156.2	453.3	0.547	1.020	-0.85	1.218	107.1	253.9	-2.7	0.366
45157.1	45292.0	0.366	235.7	12.8	4.38	1.107	72.7	0.315	0.651	127.2	334.2	0.446D	0.857	-0.05	1.686	83.9	288.9	-0.2	0.466
5.07	11.81		+/+	23.8	0.0	75.3	0.0	1.371	1.445	330.5	-40.7	13.422	0.443	4.859	138.9	3.1	132.5	101.2	1.709
44990.0	45179.8	0.235	66.3	25.0	0.94	0.847	79.6	0.341	0.760	158.5	461.6	0.501	1.019	-2.79	1.207	109.7	285.8	-7.6	0.420
45179.8	45292.0	0.420	263.2	-29.9	-11.78	1.072	73.1	0.334	0.616	136.2	306.4	0.410D	0.822	15.47	1.660	77.4	311.8	38.2	0.698
5.27	18.57	615.5	+/-	30.8	2.8	111.8	0.0	1.491	1.445	347.8	44.3	16.027	0.335	4.133	130.2	9.7	135.6	113.7	0.926
45000.0	45181.5	0.202	65.8	24.5	0.70	0.843	83.0	0.321	0.758	164.7	460.3	0.515	1.002	-3.03	1.206	108.5	289.1	-8.8	0.397
45181.5	45292.0	0.397	266.5	-24.5	-9.28	1.069	73.1	0.336	0.613	137.0	304.5	0.407D	0.820	12.91	1.658	76.9	311.2	32.6	0.670
4.77	17.75		+/-	26.7	0.0	114.5	0.0	1.499	1.445	356.0	34.7	14.958	0.376	4.328	140.2	10.3	139.7	113.1	1.251
45010.0	45183.2	0.181	62.6	23.4	0.50	0.840	86.1	0.310	0.757	171.3	459.6	0.522	0.992	-3.21	1.205	107.9	292.1	-9.6	0.384
45183.2	45292.0	0.384	269.3	-20.6	-7.61	1.065	73.1	0.339	0.610	137.8	302.6	0.403D	0.817	11.19	1.655	76.4	311.3	28.4	0.657
4.49	17.38		+/-	24.6	0.0	117.3	0.0	1.507	1.445	3.4	25.6	14.203	0.402	4.691	149.5	10.9	142.8	111.5	1.482
45020.0	45138.2	0.320	346.2	17.5	7.53	0.933	106.1	0.308	0.868	228.3	434.7	0.601	1.136A	-7.35	1.265	105.4	232.0	-24.4	0.377
45138.2	45292.0	0.377	209.7	6.7	2.37	1.127	71.7	0.323	0.675	121.4	358.3	0.457D	0.893	2.55	1.702	89.6	268.3	10.8	0.403
6.79	10.00	985.1	+/+	38.0	5.0	45.4	0.0	1.255	1.445	327.4	-53.8	15.038	0.417	3.519	123.9	25.3	111.5	83.0	0.862
45020.0	45184.5	0.173	56.2	21.6	0.36	0.838	89.4	0.305	0.757	178.7	458.9	0.526	0.989	-3.31	1.206	107.6	294.5	-10.1	0.378
45184.5	45292.0	0.378	271.1	-18.4	-6.72	1.063	73.1	0.341	0.608	138.3	301.1	0.401D	0.815	10.28	1.653	76.1	311.7	26.0	0.653
4.39	17.26		+/-	24.0	0.0	119.4	0.0	1.513	1.445	7.7	19.5	13.913	0.414	4.802	155.3	11.2	144.7	110.4	1.575
45030.0	45160.9	0.256	5.3	15.0	2.97	0.890	102.6	0.303	0.815	213.5	445.8	0.568	1.063A	-4.27	1.239	106.5	263.1	-13.8	0.370
45160.9	45292.0	0.370	240.6	16.0	5.57	1.102	72.9	0.316	0.646	128.5	329.5	0.442D	0.850	-1.36	1.682	82.8	292.3	-4.7	0.484
5.62	12.32	641.6	+/+	37.2	3.3	81.4	0.0	1.393	1.445	343.2	-53.8	14.890	0.432	3.431	126.2	13.9	135.7	94.9	0.921
45030.0	45184.5	0.182	47.0	19.3	0.35	0.840	93.3	0.305	0.762	187.7	457.8	0.529	0.995A	-3.38	1.209	107.5	295.0	-10.3	0.378
45184.5	45292.0	0.378	271.1	-18.3	-6.72	1.063	73.1	0.341	0.608	138.3	301.1	0.401D	0.815	10.27	1.653	76.1	311.7	26.0	0.653
4.49	17.26		+/-	24.4	0.0	119.4	0.0	1.513	1.445	8.2	18.6	13.961	0.414	4.728	156.0	11.2	144.7	110.0	1.544
45040.0	45182.6	0.215	37.7	17.1	0.55	0.850	98.2	0.314	0.775	198.8	455.8	0.531	1.018A	-3.47	1.218	107.9	292.9	-10.4	0.388
45182.6	45292.0	0.388	268.3	-21.9	-8.15	1.067	73.1	0.338	0.611	137.5	303.3	0.405D	0.818	11.76	1.656	76.6	311.2	29.8	0.661
4.96	17.48		+/-	26.2	0.0	116.3	0.0	1.504	1.445	3.0	25.1	14.556	0.394	4.407	149.3	11.0	141.7	111.0	1.341
45050.0	45180.2	0.270	33.3	16.2	0.84	0.868	103.4	0.336	0.797	210.2	453.5	0.529	1.065A	-3.69	1.232	108.9	290.2	-10.4	0.414
45180.2	45292.0	0.413	264.0	-28.5	-11.09	1.071	73.1	0.335	0.616	136.4	306.0	0.410D	0.821	14.76	1.659	77.3	311.6	36.7	0.689
5.86	18.32	374.1	+/-	30.5	1.7	112.5	0.0	1.493	1.445	354.5	34.6	15.868	0.346	4.032	138.9	10.7	136.6	112.7	0.972

ARRIVAL DATE = 2445294.0

44810.0	45087.0	0.596	277.4	-20.1	2.54	0.915	54.0	0.600	0.883	137.6	471.8	0.354	1.413	5.49	1.272	125.6	133.6	7.5	0.756
45087.0	45294.0	0.756	125.4	4.9	3.97	1.171	52.3	0.612	0.726	127.9	451.5	0.282	1.170	6.83	1.721	121.9	171.3	12.0	0.833
13.10	22.56		+/+	8.6	0.0	324.4	0.0	0.884	1.449	221.5	17.9	24.271	0.104	13.322	161.0	13.1	15.1	102.3	1.277
44820.0	45090.8	0.539	288.1	-18.2	2.92	0.911	57.8	0.549	0.876	136.3	466.8	0.395	1.357	5.62	1.268	122.0	141.9	8.9	0.683
45090.8	45294.0	0.683	133.0	5.0	3.50	1.168	56.0	0.560	0.722	124.7	442.3	0.318	1.126	6.22	1.719	117.3	178.2	13.1	0.731
11.68	19.55		+/+	9.7	0.0	330.4	0.0	0.914	1.449	230.5	23.6	22.150	0.127	11.827	155.3	12.2	20.6	99.0	1.374
44830.0	45094.7	0.492	298.0	-15.6	3.23	0.907	61.0	0.506	0.869	135.6	462.7	0.430	1.308	5.62	1.264	119.0	150.1	10.0	0.623
45094.7	45294.0	0.623	140.4	5.0	3.15	1.164	59.0	0.515	0.718	122.3	433.7	0.348	1.088	5.72	1.717	113.4	185.3	14.0	0.647
10.54	17.09		+/+	10.8	0.0	336.5	0.0	0.943	1.449	239.1	27.1	20.399	0.152	10.643	151.7	11.9	26.9	96.6	1.470
44840.0	45098.7	0.452	307.3	-12.6	3.49	0.904	63.8	0.468	0.862	135.6	459.3	0.458	1.266	5.51	1.260	116.6	158.0	10.9	0.573
45098.7	45294.0	0.574	147.7	5.1	2.89	1.161	61.5	0.477	0.715	120.5	425.6	0.373	1.056	5.30	1.715	110.0	192.6	14.9	0.578
9.60	15.07		+/+	11.8	0.0	342.8	0.0	0.974	1.449	247.3	28.9	18.932	0.180	9.754	149.8	11.9	33.6	94.8	1.576
44850.0	45102.8	0.418	316.0	-9.1	3.71	0.902	66.1	0.437	0.855	136.0	456.6	0.482	1.229	5.31	1.256	114.6	165.9	11.5	0.532
45102.8	45294.0	0.532	154.8	5.2	2.69	1.157	63.6	0.445	0.711	119.2	417.8	0.395	1.027	4.92	1.712	106.9	200.3	15.6	0.522
8.84	13.44		+/+	12.6	0.0	349.3	0.0	1.305	1.449	255.1	29.3	17.688	0.209	9.106	149.3	11.9	40.8	93.7	1.697
44860.0	45107.0	0.389	324.2	-5.4	3.89	0.899	68.2	0.410	0.848	136.8	454.3	0.500	1.196	5.03	1.252	112.9	173.8	11.7	0.497
45107.0	45294.0	0.497	162.0	5.4	2.54	1.154	65.4	0.417	0.707	118.4	410.3	0.412	1.002	4.58	1.710	104.2	208.4	16.1	0.477
8.20	12.13		+/+	13.3	0.0	356.0	0.0	1.036	1.449	262.5	28.3	16.623	0.240	8.654	150.2	11.9	48.4	93.1	1.836
44870.0	45111.4	0.364	331.9	-1.5	4.04	0.897	70.0	0.387	0.841	137.9	452.6	0.516	1.167	4.66	1.248	111.5	181.7	11.7	0.467
45111.4	45294.0	0.468	169.2	5.5	2.44	1.151	66.9	0.394	0.703	117.9	402.9	0.426	0.980	4.27	1.708	101.8	216.9	16.4	0.442
7.66	11.11		+/+	13.7	0.0	2.9	0.0	1.069	1.449	269.7	26.2	15.704	0.271	8.356	152.2	11.7	56.4	93.0	1.993
44880.0	45116.0	0.341	339.4	2.5	4.14	0.895	71.6	0.368	0.835	139.3	451.4	0.528	1.142	4.23	1.244	110.4	189.5	11.2	0.443
45116.0	45294.0	0.443	176.4	5.7	2.38	1.147	68.2	0.374	0.699	117.8	395.7	0.437	0.960	3.96	1.705	99.5	225.6	16.2	0.415
7.20	10.35		+/+	14.1	0.0	10.1	0.0	1.101	1.449	276.5	22.6	14.914	0.302	8.168	155.6	11.2	64.7	93.3	2.166
44890.0	45120.6	0.321	346.6	6.5	4.20	0.893	73.0	0.352	0.828	140.9	450.5	0.537	1.119	3.72	1.241	109.4	197.4	10.4	0.422
45120.6	45294.0	0.422	183.7	6.0	2.36	1.143	69.2	0.357	0.694	118.1	388.5	0.446	0.942	3.65	1.703	97.4	234.5	15.7	0.397
6.81	9.82		+/+	14.3	0.0	17.5	0.0	1.135	1.449	283.2	17.7	14.240	0.333	8.047	160.3	10.4	73.1	94.1	2.344

DEPART PASS	PASS ARRIVE	SPEED SPEED	R A R A	DECL DECL	I 1 I 1	V 1 V 1	PSI 1 PSI 1	ECCEN ECCEN	SMA SMA	THET1 THET1	THET2 THET2	PERIH PERIH	APHEL APHEL	I 2 I 2	V 2 V 2	PSI 2 PSI 2	R A R A	DECL DECL	SPEED SPEED
DV1	DV2	DELVC	LEG	KAPPA	DELK	RAS	DECLS	COIST1	COIST2	RAP	DECLP	VP	-A	E	INCL	LAM1	LAM2	ETA	PERIC
44900.0	45125.4	0.303	353.7	10.3	4.20	0.890	74.4	0.338	0.821	142.7	450.0	0.544	1.099	3.15	1.237	108.7	205.4	9.2	0.404
45125.4	45294.0	0.405	191.0	6.3	2.38	1.139	70.2	0.343	0.690	118.6	381.4	0.453	0.926	3.34	1.700	95.4	243.3	14.8	0.385
6.46	9.50		+/+	14.5	0.0	25.1	0.0	1.168	1.449	289.7	11.3	13.679	0.362	7.923	166.2	9.2	81.5	95.3	2.506
44910.0	45130.3	0.286	0.7	14.0	4.15	0.888	75.6	0.326	0.815	144.7	449.8	0.549	1.081	2.53	1.234	108.0	213.3	7.6	0.390
45130.3	45294.0	0.390	198.4	6.7	2.44	1.135	70.9	0.332	0.685	119.3	374.4	0.457	0.912	3.01	1.697	93.6	251.8	13.5	0.381
6.15	9.36		+/+	14.8	0.0	32.9	0.0	1.202	1.449	296.3	3.5	13.234	0.389	7.740	171.9	7.7	89.7	96.6	2.622
44920.0	45135.4	0.271	7.6	17.4	4.03	0.885	76.7	0.317	0.809	146.8	449.9	0.552	1.065	1.88	1.230	107.6	221.3	5.8	0.379
45135.4	45294.0	0.379	205.8	7.3	2.56	1.131	71.6	0.323	0.679	120.3	367.4	0.460	0.899	2.64	1.693	91.8	259.8	11.8	0.381
5.87	9.38		+/+	15.5	0.0	40.9	0.0	1.236	1.449	302.9	-5.4	12.915	0.413	7.432	171.5	5.8	97.6	97.9	2.656
44930.0	45140.4	0.255	14.4	20.4	3.85	0.882	77.9	0.309	0.802	149.2	450.2	0.555	1.050	1.19	1.227	107.2	229.1	3.8	0.369
45140.4	45294.0	0.370	213.0	8.0	2.75	1.127	72.1	0.316	0.674	121.5	360.6	0.461	0.887	2.22	1.690	90.2	267.2	9.8	0.386
5.60	9.53		+/+	16.5	0.0	48.8	0.0	1.269	1.449	309.5	-14.7	12.720	0.434	6.953	164.1	3.8	104.9	99.0	2.583
44940.0	45145.5	0.241	21.1	22.9	3.61	0.879	79.0	0.303	0.796	151.7	450.7	0.555	1.037	0.50	1.224	106.9	236.9	1.6	0.363
45145.5	45294.0	0.363	220.2	9.0	3.03	1.122	72.5	0.311	0.668	122.8	353.9	0.460D	0.876	1.73	1.686	88.6	274.0	7.4	0.395
5.36	9.78		+/+	18.1	0.0	56.9	0.0	1.301	1.449	316.2	-23.9	12.663	0.450	6.343	155.4	1.6	111.7	99.8	2.406
44950.0	45150.5	0.227	27.6	24.9	3.31	0.875	80.1	0.298	0.790	154.5	451.4	0.555	1.025	-0.18	1.221	106.7	244.5	-0.6	0.358
45150.5	45294.0	0.358	227.3	10.3	3.46	1.117	72.9	0.308	0.662	124.3	347.4	0.458D	0.866	1.11	1.682	87.0	280.1	4.6	0.407
5.14	10.12		+/+	20.4	0.0	64.9	0.0	1.332	1.449	322.8	-32.5	12.749	0.462	5.654	147.0	0.7	117.9	100.2	2.151
44960.0	45155.7	0.214	33.9	26.3	2.96	0.871	81.1	0.295	0.784	157.3	452.3	0.553	1.015	-0.84	1.218	106.6	252.2	-2.7	0.356
45155.7	45294.0	0.356	234.3	12.4	4.13	1.111	73.2	0.306	0.656	126.0	340.9	0.455D	0.857	0.24	1.678	85.5	285.8	1.0	0.422
4.95	10.56		+/+	23.4	0.0	73.2	0.0	1.363	1.449	329.2	-40.4	13.027	0.467	4.933	139.1	2.9	123.7	100.6	1.837
44970.0	45161.2	0.204	40.5	27.0	2.54	0.866	82.0	0.295	0.778	160.0	453.6	0.549	1.008	-1.45	1.216	106.7	260.3	-4.7	0.359
45161.2	45294.0	0.359	241.6	16.1	5.38	1.105	73.4	0.306	0.649	127.9	333.9	0.450D	0.847	-1.21	1.672	84.0	291.3	-4.5	0.443
4.81	11.14		+/+	27.9	0.0	82.0	0.0	1.395	1.449	334.6	-48.3	13.661	0.460	4.155	131.2	5.0	129.1	101.5	1.451
45000.0	45184.1	0.218	70.9	24.0	0.44	0.841	81.4	0.335	0.756	162.2	462.0	0.502	1.009	-3.15	1.204	109.4	292.4	-8.7	0.415
45184.1	45294.0	0.415	268.8	-32.1	-12.38	1.070	73.9	0.324	0.614	137.2	306.2	0.415D	0.813	15.79	1.646	77.6	315.8	40.6	0.672
5.01	17.81	752.4	+/-	32.1	3.5	118.8	0.0	1.511	1.449	352.5	44.4	15.896	0.344	4.049	129.2	10.7	132.9	115.0	0.902
45010.0	45185.4	0.190	67.7	23.1	0.28	0.838	85.0	0.319	0.754	169.1	460.8	0.514	0.995	-3.28	1.204	108.4	295.0	-9.5	0.395
45185.4	45294.0	0.395	271.4	-28.1	-10.46	1.068	73.9	0.326	0.612	137.8	304.7	0.412D	0.811	13.82	1.644	77.3	315.2	36.2	0.648
4.61	17.12		+/-	29.0	0.0	120.9	0.0	1.517	1.449	358.2	37.7	15.187	0.380	3.996	136.0	11.2	136.0	115.2	1.138
45020.0	45139.9	0.309	347.6	16.6	6.84	0.929	105.6	0.305	0.862	226.6	435.6	0.599	1.124A	-6.74	1.262	105.3	234.4	-22.7	0.370
45139.9	45294.0	0.370	212.3	7.9	2.73	1.127	72.1	0.317	0.675	121.3	361.3	0.461	0.888	2.27	1.690	90.3	266.5	10.0	0.386
6.57	9.51	690.9	+/+	37.5	3.6	48.0	0.0	1.265	1.449	326.6	-54.1	14.893	0.432	3.432	124.4	23.5	104.2	85.0	0.912
45020.0	45186.4	0.176	61.1	21.6	0.18	0.836	88.5	0.310	0.755	176.7	459.9	0.521	0.989	-3.35	1.204	107.9	297.0	-10.0	0.385
45186.4	45294.0	0.385	273.1	-25.7	-9.37	1.066	73.9	0.327	0.610	138.3	303.6	0.410D	0.810	12.70	1.643	77.0	315.1	33.5	0.637
4.42	16.79		+/-	27.5	0.0	122.4	0.0	1.521	1.449	3.2	33.0	14.599	0.400	4.203	141.1	11.4	138.0	114.2	1.283
45030.0	45186.7	0.180	52.1	19.6	0.15	0.837	92.4	0.309	0.759	185.3	458.9	0.524	0.993A	-3.38	1.207	107.8	297.9	-10.2	0.382
45186.7	45294.0	0.382	273.5	-25.1	-9.10	1.065	73.9	0.328	0.609	138.4	303.3	0.410D	0.809	12.43	1.643	76.9	315.2	32.9	0.635
4.47	16.72		+/-	27.5	0.0	122.9	0.0	1.523	1.449	4.8	31.3	14.508	0.405	4.210	142.8	11.3	138.5	113.7	1.301
45040.0	45185.9	0.205	43.5	17.6	0.22	0.843	96.7	0.315	0.767	195.1	457.5	0.526	1.009A	-3.42	1.213	108.1	297.3	-10.2	0.390
45185.9	45294.0	0.389	272.2	-26.9	-9.91	1.067	73.9	0.327	0.611	138.0	304.2	0.411D	0.810	13.26	1.644	77.1	315.2	34.9	0.642
4.81	16.94		+/-	29.0	0.0	121.6	0.0	1.519	1.449	2.3	33.5	14.994	0.390	3.990	140.2	11.0	137.0	114.1	1.166
45050.0	45184.4	0.251	38.7	16.5	0.19	0.856	101.6	0.333	0.784	205.6	455.6	0.523	1.045A	-3.51	1.224	108.9	295.9	-9.9	0.410
45184.4	45294.0	0.410	269.4	-31.2	-11.93	1.070	73.9	0.325	0.613	137.4	305.9	0.414D	0.813	15.33	1.646	77.5	315.6	39.6	0.666
5.53	17.64	729.7	+/-	32.5	3.4	119.2	0.0	1.512	1.449	357.9	38.9	15.787	0.352	3.981	134.4	10.5	133.6	113.9	0.906

ARRIVAL DATE = 2445296.0

44810.0	45088.3	0.630	276.6	-19.9	2.99	0.915	51.9	0.629	0.883	138.9	475.0	0.328	1.439	5.91	1.272	127.8	134.0	7.4	0.800
45088.3	45296.0	0.800	126.1	5.6	4.99	1.170	50.0	0.642	0.725	130.2	457.4	0.259	1.190	7.58	1.712	124.8	172.9	11.5	0.927
13.97	25.33		+/+	8.1	0.0	326.3	0.0	0.894	1.450	221.5	13.0	25.580	0.092	14.231	165.4	14.4	12.6	104.4	1.223
44820.0	45092.0	0.567	287.5	-18.0	3.30	0.911	56.1	0.573	0.876	137.1	469.5	0.374	1.378	5.96	1.268	123.7	142.4	8.8	0.719
45092.0	45296.0	0.719	133.8	5.7	4.33	1.167	54.2	0.585	0.721	126.6	447.9	0.299	1.143	6.77	1.710	119.8	179.4	12.4	0.813
12.35	21.96		+/+	9.1	0.0	332.2	0.0	0.922	1.450	230.7	19.5	23.177	0.115	12.634	159.1	13.1	17.0	100.8	1.334
44830.0	45095.8	0.514	297.7	-15.5	3.55	0.907	59.7	0.525	0.869	136.2	464.9	0.413	1.325	5.89	1.264	120.4	150.7	9.9	0.651
45095.8	45296.0	0.652	141.3	5.8	3.85	1.163	57.6	0.536	0.717	123.7	439.0	0.333	1.102	6.12	1.708	115.5	186.0	13.2	0.719
11.06	19.19		+/+	10.1	0.0	338.2	0.0	0.951	1.450	239.4	23.6	21.204	0.139	11.341	155.0	12.4	22.5	98.0	1.442
44840.0	45099.7	0.469	307.1	-12.5	3.76	0.904	62.7	0.484	0.862	135.9	461.2	0.445	1.279	5.73	1.260	117.7	158.7	10.8	0.596
45099.7	45296.0	0.596	148.6	5.9	3.49	1.160	60.4	0.494	0.714	121.6	430.8	0.361	1.067	5.59	1.706	111.9	192.8	13.9	0.641
10.01	16.90		+/+	11.1	0.0	344.4	0.0	0.981	1.450	247.7	25.7	19.561	0.167	10.346	152.7	12.2	28.4	96.0	1.558
44850.0	45103.7	0.432	315.9	-9.0	3.93	0.901	65.3	0.450	0.855	136.1	458.1	0.471	1.239	5.48	1.256	115.4	166.6	11.4	0.550
45103.7	45296.0	0.550	155.8	6.0	3.22	1.157	62.8	0.458	0.710	120.1	422.9	0.385	1.036	5.13	1.704	108.6	199.7	14.5	0.576
9.15	15.00		+/+	11.9	0.0	350.7	0.0	1.011	1.450	255.5	26.3	18.177	0.196	9.622	152.1	12.1	34.8	94.7	1.689
44860.0	45107.8	0.400	324.1	-5.3	4.06	0.899	67.5	0.420	0.848	136.8	455.6	0.492	1.204	5.15	1.252	113.6	174.4	11.6	0.511
45107.8	45296.0	0.511	162.9	6.2	3.01	1.154	64.7	0.428	0.706	119.0	415.3	0.404	1.009	4.72	1.702	105.8	207.0	14.9	0.523
8.44	13.45		+/+	12.6	0.0	357.3	0.0	1.042	1.450	262.9	25.4	16.997	0.227	9.097	152.8	12.0	41.5	93.9	1.836
44870.0	45112.1	0.372	332.0	-1.4	4.17	0.897	69.4	0.395	0.841	137.8	453.7	0.509	1.173	4.76	1.248	112.0	182.3	11.6	0.478
45112.1	45296.0	0.478	170.0	6.3	2.87	1.150	66.4	0.402	0.703	118.4	407.9	0.420	0.985	4.34	1.699	103.2	214.5	15.2	0.479
7.84	12.19		+/+	13.1	0.0	4.1	0.0	1.074	1.450	270.0	23.2	15.986	0.259	8.734	154.9	11.7	48.6	93.7	2.001
44880.0	45116.5	0.348	339.5	2.5	4.23	0.895	71.2	0.374	0.834	139.1	452.2	0.523	1.146	4.29	1.244	110.7	190.1	11.1	0.451
45116.5	45296.0	0.451	177.2	6.5	2.77	1.147	67.8	0.380	0.699	118.1	400.6	0.433	0.964	3.99	1.697	100.9	222.4	15.1	0.444
7.34	11.19		+/+	13.5	0.0	11.0	0.0	1.106	1.450	276.8	19.6	15.118	0.291	8.483	158.3	11.2	56.0	94.0	2.180
44890.0	45121.1	0.326	346.8	6.5	4.26	0.892	72.7	0.356	0.828	140.7	451.1	0.533	1.122	3.76	1.241	109.7	197.9	10.3	0.428
45121.1	45296.0	0.428	184.3	6.8	2.71	1.143	69.0	0.361	0.694	118.2	393.5	0.443	0.945	3.64	1.694	98.7	230.5	14.7	0.418
6.90	10.42		+/+	13.8	0.0	18.3	0.0	1.138	1.450	283.3	14.6	14.381	0.324	8.296	162.9	10.3	63.7	94.7	2.361

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44900.0	45125.8	0.306	353.8	10.3	4.24	0.890	74.2	0.341	0.821	142.5	450.4	0.542	1.101	3.17	1.237	108.8	205.7	9.1	0.408
45125.8	45296.0	0.408	191.5	7.1	2.70	1.140	70.0	0.346	0.690	118.6	386.5	0.451	0.928	3.29	1.692	96.7	238.7	14.0	0.398
6.52	9.86		+/+	14.2	0.0	25.6	0.0	1.171	1.450	289.8	8.2	13.768	0.355	8.104	168.4	9.1	71.5	95.8	2.523
44910.0	45130.5	0.288	C.8	14.0	4.16	0.888	75.5	0.328	0.815	144.6	450.0	0.548	1.082	2.54	1.234	108.1	213.5	7.6	0.392
45130.5	45296.0	0.392	198.7	7.5	2.74	1.136	70.9	0.333	0.685	119.2	379.6	0.457	0.913	2.93	1.689	94.9	246.8	12.9	0.385
6.18	9.48		+/+	14.7	0.0	33.2	0.0	1.203	1.450	296.1	0.4	13.278	0.385	7.837	172.4	7.6	79.3	97.0	2.634
44920.0	45135.4	0.271	7.6	17.4	4.04	0.885	76.7	0.317	0.808	146.8	450.0	0.552	1.065	1.88	1.230	107.6	221.3	5.8	0.379
45135.4	45296.0	0.379	205.9	8.0	2.83	1.132	71.6	0.322	0.680	120.0	372.7	0.461	0.900	2.54	1.686	93.1	254.8	11.4	0.377
5.87	9.26		+/+	15.4	0.0	40.9	0.0	1.236	1.450	302.6	-8.3	12.919	0.412	7.457	169.1	5.8	87.1	98.2	2.662
44930.0	45140.3	0.254	14.3	20.4	3.85	0.882	77.9	0.308	0.802	149.3	450.1	0.555	1.049	1.19	1.227	107.1	228.9	3.8	0.368
45140.3	45296.0	0.368	213.0	8.7	2.98	1.128	72.2	0.314	0.675	121.1	366.1	0.463	0.888	2.12	1.682	91.4	262.3	9.6	0.375
5.59	9.20		+/+	16.6	0.0	48.6	0.0	1.268	1.450	309.0	-17.2	12.685	0.437	6.924	161.6	3.8	94.5	99.1	2.588
44940.0	45145.2	0.239	20.8	22.9	3.60	0.879	79.1	0.301	0.796	152.0	450.4	0.557	1.036	0.50	1.224	106.8	236.5	1.6	0.360
45145.2	45296.0	0.360	220.0	9.6	3.22	1.124	72.7	0.308	0.670	122.3	359.5	0.464D	0.876	1.64	1.679	89.9	269.3	7.3	0.377
5.33	9.25		+/+	18.3	0.0	56.4	0.0	1.299	1.450	315.5	-25.9	12.587	0.457	6.295	153.4	1.6	101.5	99.7	2.419
44950.0	45150.0	0.223	27.0	25.0	3.31	0.875	80.3	0.294	0.791	154.9	450.9	0.558	1.023	-0.18	1.221	106.5	243.9	-0.6	0.354
45150.0	45296.0	0.354	226.8	10.8	3.55	1.119	73.1	0.303	0.665	123.6	353.2	0.463D	0.866	1.08	1.675	88.4	275.8	4.7	0.382
5.08	9.40		+/+	20.5	0.0	64.1	0.0	1.329	1.450	321.9	-33.8	12.617	0.473	5.621	145.7	0.6	108.0	100.1	2.185
44960.0	45154.8	0.209	32.7	26.4	2.98	0.871	81.6	0.290	0.785	158.1	451.6	0.557	1.013	-0.83	1.219	106.3	251.1	-2.8	0.350
45154.8	45296.0	0.350	233.4	12.4	4.05	1.114	73.5	0.300	0.659	125.1	347.0	0.461D	0.857	0.37	1.671	87.0	281.7	1.6	0.391
4.87	9.65		+/+	23.3	0.0	71.7	0.0	1.357	1.450	328.1	-40.8	12.795	0.483	4.957	138.8	2.8	114.0	100.3	1.912
44970.0	45159.7	0.196	38.0	27.1	2.61	0.867	82.8	0.288	0.780	161.4	452.5	0.555	1.004	-1.43	1.216	106.2	258.4	-4.8	0.349
45159.7	45296.0	0.349	239.9	14.8	4.82	1.109	73.8	0.299	0.653	126.7	340.9	0.458D	0.848	-0.61	1.667	85.6	287.3	-2.5	0.403
4.69	9.99		+/+	26.8	0.0	79.5	0.0	1.386	1.450	333.8	-47.1	13.172	0.486	4.314	132.5	4.9	119.6	100.6	1.609
44980.0	45165.3	0.189	44.1	27.1	2.16	0.861	83.7	0.291	0.774	164.0	454.0	0.549	0.999	-1.98	1.214	106.5	266.5	-6.5	0.355
45165.3	45296.0	0.354	247.2	19.4	6.38	1.103	74.0	0.298	0.646	128.8	333.9	0.453D	0.838	-2.39	1.662	84.1	293.3	-9.4	0.423
4.59	10.58		+/+	32.2	0.0	88.6	0.0	1.417	1.450	338.2	-53.6	14.039	0.471	3.611	125.6	6.8	125.1	102.0	1.229
45010.0	45188.2	0.204	73.9	22.6	-0.01	0.834	83.3	0.332	0.751	166.2	462.5	0.502	1.001	-3.40	1.202	109.2	298.7	-9.4	0.411
45188.2	45296.0	0.411	274.0	-34.3	-12.98	1.068	74.6	0.316	0.612	138.3	306.2	0.418D	0.805	16.08	1.636	77.9	319.4	43.2	0.647
4.80	17.09	981.2	+/-	33.6	4.6	125.4	0.0	1.530	1.450	357.1	44.9	15.807	0.351	3.994	128.0	11.5	129.9	116.0	0.863
45020.0	45140.9	0.303	348.4	16.2	6.49	0.926	105.3	0.303	0.858	225.6	436.1	0.598	1.117A	-6.43	1.260	105.3	235.8	-21.8	0.367
45140.9	45296.0	0.367	213.8	8.8	3.01	1.127	72.3	0.313	0.675	121.2	365.3	0.463	0.886	2.07	1.682	91.3	263.2	9.3	0.375
6.46	9.20	585.0	+/+	37.4	3.1	49.6	0.0	1.272	1.450	326.5	-54.5	14.822	0.439	3.390	124.3	22.6	95.4	86.0	0.932
45020.0	45189.1	0.183	68.1	21.5	-0.10	0.832	87.1	0.319	0.752	173.7	461.4	0.512	0.991	-3.42	1.202	108.5	300.7	-9.9	0.396
45189.1	45296.0	0.395	275.9	-31.5	-11.60	1.066	74.6	0.317	0.610	138.7	305.2	0.417D	0.803	14.67	1.634	77.6	318.9	40.0	0.629
4.51	16.54	158.9	+/-	31.5	0.8	126.9	0.0	1.533	1.450	0.5	40.4	15.451	0.379	3.771	132.2	11.7	132.1	116.8	1.016
45030.0	45189.6	0.179	59.3	19.8	-0.14	0.832	91.0	0.315	0.754	182.1	460.4	0.517	0.991A	-3.41	1.204	108.2	301.8	-10.1	0.390
45189.6	45296.0	0.389	276.7	-30.4	-11.04	1.065	74.7	0.318	0.609	138.9	304.7	0.416D	0.803	14.10	1.634	77.5	318.8	38.7	0.622
4.47	16.34		+/-	31.0	0.0	127.6	0.0	1.535	1.450	2.8	38.3	15.247	0.391	3.746	134.5	11.6	133.1	116.6	1.073
45040.0	45189.3	0.196	50.4	18.0	-0.11	0.836	95.2	0.318	0.761	191.3	459.2	0.519	1.003A	-3.39	1.209	108.3	302.0	-9.9	0.393
45189.3	45296.0	0.393	276.2	-31.1	-11.39	1.066	74.7	0.317	0.610	138.8	305.0	0.416D	0.803	14.46	1.634	77.6	318.8	39.5	0.626
4.70	16.47	193.8	+/-	32.0	0.9	127.1	0.0	1.534	1.450	2.6	38.9	15.401	0.383	3.740	133.9	11.2	132.5	116.1	1.009

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44820.0	45093.2	0.599	286.8	-17.9	3.78	0.911	54.1	0.601	0.876	138.3	472.6	0.350	1.402	6.38	1.267	125.8	142.9	8.6	0.761
45093.2	45298.0	0.761	134.7	6.3	5.25	1.166	52.1	0.614	0.720	128.7	453.5	0.278	1.162	7.40	1.704	122.5	181.0	11.8	0.904
13.17	24.63		+/+	8.5	0.0	334.2	0.0	0.932	1.449	230.9	15.5	24.407	0.102	13.503	162.7	14.2	14.1	102.8	1.279
44830.0	45097.0	0.540	297.2	-15.4	3.95	0.907	58.0	0.548	0.869	136.9	467.5	0.393	1.344	6.23	1.263	122.0	151.3	9.8	0.685
45097.0	45298.0	0.686	142.3	6.5	4.60	1.163	55.9	0.560	0.716	125.4	444.4	0.315	1.118	6.58	1.702	117.9	187.2	12.5	0.798
11.70	21.51		+/+	9.5	0.0	340.1	0.0	0.961	1.449	239.8	20.2	22.182	0.126	12.101	158.1	13.1	18.6	99.7	1.399
44840.0	45100.8	0.491	306.8	-12.3	4.09	0.904	61.3	0.503	0.861	136.3	463.4	0.428	1.295	6.00	1.259	119.0	159.4	10.6	0.623
45100.8	45298.0	0.623	149.6	6.6	4.12	1.159	59.1	0.514	0.713	123.0	435.8	0.346	1.079	5.92	1.700	113.9	193.5	13.0	0.710
10.51	18.92		+/+	10.4	0.0	346.2	0.0	0.990	1.449	248.1	22.7	20.340	0.152	11.001	155.6	12.6	23.9	97.4	1.524
44850.0	45104.7	0.450	315.7	-8.9	4.20	0.901	64.2	0.465	0.854	136.3	459.9	0.457	1.252	5.69	1.255	116.5	167.3	11.2	0.572
45104.7	45298.0	0.572	156.9	6.7	3.76	1.156	61.7	0.475	0.709	121.1	427.8	0.373	1.046	5.36	1.698	110.4	199.9	13.5	0.637
9.54	16.77		+/+	11.3	0.0	352.4	0.0	1.019	1.449	256.0	23.4	18.797	0.181	10.170	154.7	12.3	29.6	95.9	1.661
44860.0	45108.8	0.414	324.1	-5.2	4.28	0.899	66.6	0.433	0.848	136.8	457.2	0.481	1.214	5.32	1.252	114.4	175.2	11.5	0.529
45108.8	45298.0	0.529	164.0	6.9	3.49	1.153	63.9	0.441	0.706	119.9	420.1	0.394	1.017	4.87	1.696	107.4	206.4	13.8	0.575
8.75	14.98		+/+	12.0	0.0	358.8	0.0	1.049	1.449	263.4	22.6	17.490	0.212	9.564	155.4	12.1	35.6	95.0	1.814
44870.0	45113.0	0.384	332.0	-1.4	4.34	0.896	68.7	0.405	0.841	137.7	454.9	0.500	1.181	4.88	1.248	112.7	183.0	11.5	0.492
45113.0	45298.0	0.493	171.0	7.0	3.29	1.150	65.7	0.413	0.702	119.0	412.7	0.412	0.992	4.43	1.694	104.7	213.2	14.0	0.524
8.08	13.50		+/+	12.6	0.0	5.4	0.0	1.080	1.449	270.5	20.4	16.375	0.244	9.127	157.4	11.7	41.9	94.7	1.984
44880.0	45117.3	0.357	339.6	2.6	4.36	0.894	70.6	0.382	0.834	139.0	453.2	0.516	1.153	4.38	1.244	111.3	190.7	11.0	0.462
45117.3	45298.0	0.462	178.1	7.2	3.15	1.146	67.3	0.388	0.698	118.6	405.4	0.427	0.969	4.02	1.691	102.3	220.2	13.9	0.482
7.52	12.27		+/+	13.0	0.0	12.3	0.0	1.111	1.449	277.2	16.8	15.424	0.277	8.807	160.7	11.1	48.5	94.9	2.166
44890.0	45121.8	0.333	346.9	6.5	4.35	0.892	72.3	0.362	0.828	140.5	451.9	0.528	1.127	3.82	1.241	110.1	198.5	10.2	0.436
45121.8	45298.0	0.436	185.2	7.5	3.06	1.143	68.6	0.368	0.694	118.5	398.3	0.439	0.949	3.63	1.689	100.0	227.4	13.6	0.448
7.04	11.28		+/+	13.4	0.0	19.3	0.0	1.143	1.449	283.7	11.7	14.617	0.311	8.541	165.2	10.3	55.3	95.5	2.346
44900.0	45126.3	0.312	354.0	10.4	4.30	0.890	73.8	0.345	0.821	142.3	451.0	0.538	1.104	3.21	1.237	109.2	206.2	9.1	0.415
45126.3	45298.0	0.415	192.3	7.8	3.02	1.140	69.7	0.350	0.690	118.7	391.3	0.448	0.932	3.25	1.686	98.0	234.9	13.0	0.420
6.62	10.50		+/+	13.9	0.0	26.5	0.0	1.175	1.449	290.0	5.3	13.947	0.344	8.277	170.0	9.1	62.4	96.4	2.506
44910.0	45131.0	0.292	1.0	14.0	4.20	0.888	75.2	0.331	0.815	144.4	450.5	0.545	1.084	2.57	1.234	108.4	214.0	7.6	0.397
45131.0	45298.0	0.397	199.4	8.2	3.03	1.136	70.7	0.336	0.685	119.2	384.4	0.455	0.916	2.86	1.684	96.1	242.5	12.1	0.399
6.25	9.90		+/+	14.5	0.0	33.9	0.0	1.206	1.449	296.3	-2.4	13.412	0.376	7.943	171.7	7.6	69.7	97.6	2.612

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44920.0	45135.7	0.273	7.8	17.4	4.05	0.885	76.5	0.319	0.808	146.6	450.3	0.550	1.066	1.89	1.230	107.7	221.6	5.8	0.382
45135.7	45298.0	0.382	206.4	8.7	3.09	1.132	71.5	0.324	0.681	119.9	377.7	0.460	0.901	2.45	1.681	94.3	250.0	10.8	0.384
5.92	9.47		+/+	15.4	0.0	41.4	0.0	1.238	1.449	302.6	-10.9	13.008	0.406	7.486	166.8	5.8	77.0	98.6	2.635
44930.0	45140.4	0.255	14.4	20.4	3.85	0.882	77.9	0.309	0.802	149.2	450.2	0.554	1.050	1.19	1.227	107.2	229.1	3.8	0.369
45140.4	45298.0	0.370	213.3	9.4	3.21	1.129	72.2	0.314	0.676	120.9	371.2	0.464	0.889	2.03	1.678	92.7	257.3	9.1	0.374
5.61	9.19		+/+	16.7	0.0	48.8	0.0	1.269	1.449	308.9	-19.5	12.735	0.434	6.906	159.4	3.8	84.1	99.4	2.561
44940.0	45145.1	0.238	20.8	22.9	3.60	0.879	79.1	0.301	0.796	152.0	450.4	0.557	1.036	0.50	1.224	106.8	236.5	1.6	0.360
45145.1	45298.0	0.360	220.1	10.2	3.39	1.125	72.8	0.307	0.671	122.0	364.8	0.465	0.877	1.56	1.674	91.1	264.4	7.1	0.369
5.33	9.04		+/+	18.4	0.0	56.4	0.0	1.299	1.449	315.2	-27.7	12.595	0.457	6.258	151.6	1.6	91.1	99.8	2.404
44950.0	45149.8	0.222	26.7	25.0	3.31	0.876	80.4	0.293	0.791	155.1	450.8	0.559	1.023	-0.18	1.222	106.4	243.6	-0.6	0.352
45149.8	45298.0	0.353	226.7	11.2	3.67	1.121	73.2	0.301	0.666	123.2	358.6	0.466D	0.867	1.03	1.671	89.7	270.9	4.7	0.368
5.06	9.01		+/+	20.6	0.0	63.7	0.0	1.327	1.449	321.5	-35.0	12.575	0.477	5.593	144.5	0.6	97.6	100.0	2.191
44960.0	45154.3	0.206	32.0	26.4	2.99	0.872	81.8	0.288	0.785	158.5	451.2	0.559	1.011	-0.82	1.219	106.1	250.6	-2.8	0.347
45154.3	45298.0	0.347	233.0	12.6	4.05	1.117	73.6	0.297	0.661	124.5	352.7	0.465D	0.857	0.41	1.668	88.3	277.0	1.8	0.371
4.83	9.08		+/+	23.2	0.0	71.0	0.0	1.355	1.449	327.5	-41.4	12.682	0.492	4.963	138.2	2.8	103.7	100.1	1.948
44970.0	45158.8	0.192	36.5	27.1	2.64	0.868	83.2	0.284	0.780	162.2	451.9	0.559	1.002	-1.41	1.217	106.0	257.3	-4.8	0.344
45158.8	45298.0	0.344	239.1	14.4	4.60	1.112	74.0	0.294	0.656	125.9	347.0	0.463D	0.849	-0.36	1.664	87.1	282.7	-1.6	0.376
4.63	9.24		+/+	26.4	0.0	78.1	0.0	1.381	1.449	333.1	-46.8	12.929	0.500	4.386	132.8	4.9	109.4	100.2	1.693
44980.0	45163.3	0.180	40.1	27.1	2.28	0.863	84.6	0.282	0.776	166.0	452.7	0.557	0.995	-1.95	1.214	106.0	263.9	-6.6	0.344
45163.3	45298.0	0.344	245.0	17.0	5.41	1.107	74.2	0.292	0.651	127.5	341.4	0.460D	0.841	-1.39	1.660	85.8	288.0	-6.0	0.385
4.47	9.50		+/+	30.1	0.0	85.3	0.0	1.406	1.449	338.0	-51.7	13.370	0.500	3.851	127.9	6.8	114.6	100.7	1.426
44990.0	45168.7	0.175	45.0	26.4	1.82	0.857	85.7	0.286	0.771	169.0	454.3	0.550	0.991	-2.42	1.212	106.3	271.8	-8.0	0.351
45168.7	45298.0	0.351	251.8	21.9	7.09	1.101	74.5	0.292	0.644	129.5	334.7	0.456D	0.831	-3.31	1.655	84.4	294.2	-13.6	0.405
4.41	10.05		+/+	35.8	0.0	94.1	0.0	1.436	1.449	341.3	-56.7	14.363	0.480	3.256	122.4	8.4	120.0	102.3	1.084
45020.0	45139.6	0.311	347.3	16.8	6.97	0.930	105.7	0.305	0.863	226.9	435.4	0.599	1.126A	-6.85	1.262	105.3	233.9	-23.0	0.372
45139.6	45298.0	0.372	212.1	9.2	3.18	1.129	72.1	0.316	0.677	120.7	372.3	0.463	0.891	2.11	1.678	92.9	256.0	9.4	0.376
6.61	9.23	958.2	+/+	38.7	5.0	47.5	0.0	1.263	1.449	327.5	-55.7	14.919	0.429	3.448	122.8	23.8	82.9	84.4	0.866
45020.0	45160.4	0.213	8.4	15.7	2.71	0.879	99.1	0.281	0.800	205.0	446.5	0.575	1.025A	-3.71	1.230	105.4	262.0	-12.9	0.344
45160.4	45298.0	0.344	241.2	15.2	4.84	1.111	74.1	0.293	0.654	126.5	345.1	0.462D	0.846	-0.68	1.663	86.6	284.6	-3.0	0.379
4.93	9.32		+/+	34.9	0.0	80.6	0.0	1.390	1.449	340.0	-54.1	13.950	0.501	3.339	125.9	13.0	111.3	96.2	1.171
45020.0	45164.3	0.200	13.9	16.7	2.28	0.871	97.7	0.281	0.791	200.8	448.5	0.569	1.014A	-3.52	1.225	105.6	267.3	-12.1	0.345
45164.3	45298.0	0.345	246.3	17.7	5.65	1.106	74.3	0.292	0.649	127.8	340.2	0.460D	0.839	-1.67	1.659	85.6	289.2	-7.1	0.388
4.74	9.58		+/+	36.3	0.0	86.9	0.0	1.412	1.449	342.8	-55.6	14.175	0.498	3.208	124.2	12.1	115.7	97.9	1.100
45030.0	45192.7	0.182	67.2	19.8	-0.44	0.827	89.4	0.322	0.750	178.7	462.0	0.508	0.991	-3.47	1.202	108.7	306.0	-9.9	0.399
45192.7	45298.0	0.399	280.0	-34.8	-12.76	1.065	75.3	0.309	0.608	139.7	305.9	0.420D	0.797	15.52	1.628	78.0	322.2	44.0	0.613
4.50	16.08	839.8	+/-	34.4	4.1	132.6	0.0	1.548	1.449	3.9	43.4	15.529	0.372	3.819	128.9	11.9	128.0	117.0	0.887
45040.0	45192.7	0.191	58.0	18.3	-0.43	0.829	93.6	0.322	0.754	187.6	460.9	0.511	0.998A	-3.39	1.205	108.6	306.6	-9.8	0.399
45192.7	45298.0	0.398	280.0	-34.8	-12.73	1.065	75.3	0.309	0.608	139.7	305.9	0.420D	0.797	15.48	1.628	78.0	322.2	44.0	0.612
4.62	16.06	921.8	+/-	34.9	4.5	132.6	0.0	1.548	1.449	4.9	43.1	15.521	0.373	3.814	129.4	11.4	128.1	116.5	0.873
									ARRIVAL DATE = 2445300.0										
44820.0	45094.6	0.637	286.0	-17.7	4.37	0.911	51.7	0.632	0.876	139.7	476.1	0.322	1.430	6.91	1.267	128.2	143.3	8.5	0.810
45094.6	45300.0	0.810	135.4	6.9	6.28	1.165	49.6	0.548	0.719	131.2	459.4	0.253	1.185	8.15	1.702	125.6	182.6	11.3	1.004
14.13	27.60		+/+	8.0	0.0	336.3	0.0	0.942	1.446	231.0	11.7	25.866	0.090	14.374	165.9	15.5	11.9	105.0	1.207
44830.0	45098.2	0.571	296.6	-15.2	4.43	0.907	56.1	0.575	0.868	137.8	470.5	0.369	1.368	6.66	1.263	124.0	151.8	9.6	0.725
45098.2	45300.0	0.725	143.2	7.0	5.42	1.162	53.9	0.589	0.715	127.4	449.8	0.294	1.137	7.10	1.699	120.4	188.7	11.8	0.886
12.46	24.10		+/+	8.9	0.0	342.1	0.0	0.970	1.446	240.1	16.9	23.353	0.113	12.888	161.0	14.1	15.4	101.5	1.338
44840.0	45102.0	0.516	306.4	-12.2	4.48	0.904	59.8	0.525	0.861	136.9	465.9	0.409	1.314	6.34	1.259	120.6	160.1	10.5	0.656
45102.0	45300.0	0.656	150.7	7.2	4.79	1.158	57.5	0.538	0.712	124.6	441.0	0.329	1.095	6.28	1.697	116.1	194.7	12.2	0.787
11.12	21.19		+/+	9.8	0.0	348.1	0.0	0.999	1.446	248.6	19.8	21.285	0.138	11.676	158.2	13.2	19.9	99.0	1.470
44850.0	45105.9	0.470	315.5	-8.8	4.52	0.901	62.9	0.483	0.854	136.6	462.1	0.441	1.267	5.96	1.255	117.7	168.1	11.1	0.598
45105.9	45300.0	0.598	158.0	7.3	4.33	1.155	60.4	0.494	0.708	122.4	432.7	0.358	1.059	5.61	1.695	112.4	200.6	12.6	0.704
10.02	18.76		+/+	10.7	0.0	354.2	0.0	1.028	1.446	256.5	20.7	19.561	0.165	10.742	157.1	12.7	25.0	97.2	1.612
44860.0	45109.9	0.431	324.0	-5.2	4.54	0.898	65.5	0.448	0.847	136.9	459.0	0.468	1.227	5.52	1.251	115.4	176.0	11.4	0.550
45109.9	45300.0	0.550	165.1	7.4	3.99	1.152	62.8	0.457	0.705	120.9	424.9	0.382	1.027	5.04	1.693	109.1	206.6	12.8	0.635
9.13	16.73		+/+	11.4	0.0	0.6	0.0	1.058	1.446	264.0	20.1	18.110	0.196	10.051	157.6	12.3	30.4	96.2	1.770
44870.0	45114.0	0.398	332.1	-1.3	4.55	0.896	67.8	0.418	0.840	137.6	456.5	0.489	1.191	5.04	1.248	113.5	183.8	11.3	0.510
45114.0	45300.0	0.510	172.2	7.6	3.72	1.149	64.9	0.426	0.701	119.8	417.3	0.402	1.000	4.53	1.691	106.3	212.7	12.8	0.576
8.39	15.01		+/+	12.0	0.0	7.1	0.0	1.088	1.446	271.1	17.9	16.879	0.228	9.536	159.6	11.8	36.0	95.7	1.943
44880.0	45118.3	0.369	339.8	2.6	4.53	0.894	69.9	0.392	0.834	138.8	454.5	0.507	1.161	4.49	1.244	112.0	191.6	10.9	0.476
45118.3	45300.0	0.476	179.2	7.8	3.53	1.146	66.6	0.399	0.697	119.2	410.1	0.419	0.976	4.06	1.689	103.7	219.0	12.7	0.527
7.76	13.58		+/+	12.6	0.0	13.8	0.0	1.118	1.446	277.8	14.2	15.833	0.261	9.139	162.8	11.2	41.9	95.8	2.125
44890.0	45122.6	0.343	347.1	6.6	4.47	0.892	71.7	0.370	0.827	140.3	453.0	0.521	1.133	3.90	1.240	110.7	199.3	10.2	0.448
45122.6	45300.0	0.448	186.2	8.1	3.40	1.143	68.1	0.376	0.693	119.0	403.0	0.432	0.954	3.63	1.686	101.4	225.5	12.4	0.486
7.23	12.38		+/+	13.1	0.0	20.6	0.0	1.149	1.446	284.2	9.1	14.950	0.295	8.797	167.0	10.3	47.9	96.3	2.303
44900.0	45127.1	0.319	354.3	10.4	4.39	0.890	73.3	0.352	0.821	142.0	452.0	0.532	1.109	3.27	1.237	109.6	207.0	9.0	0.424
45127.1	45300.0	0.424	193.3	8.4	3.33	1.139	69.3	0.357	0.689	119.1	396.0	0.443	0.935	3.20	1.684	99.2	232.2	11.9	0.451
6.77	11.39		+/+	13.6	0.0	27.7	0.0	1.180	1.446	290.5	2.6	14.218	0.330	8.463	170.8	9.1	54.3	97.2	2.460
44910.0	45131.6	0.298	1.3	14.0	4.26	0.887	74.8	0.336	0.814	144.0	451.2	0.540	1.088	2.60	1.234	108.7	214.6	7.5	0.404
45131.6	45300.0	0.404	200.2	8.8	3.30	1.136	70.4	0.341	0.685	119.4	389.1	0.452	0.919	2.79	1.681	97.3	239.1	11.0	0.423
6.36	10.59		+/+	14.3	0.0	34.9	0.0	1.211	1.446	296.7	-4.9	13.628	0.363	8.047	170.4	7.5	60.9	98.2	2.559
44920.0	45136.2	0.278	8.1	17.4	4.09	0.885	76.2	0.323	0.808	146.3	450.8	0.547	1.069	1.91	1.230	108.0	222.2	5.8	0.387
45136.2	45300.0	0.387	207.2	9.3	3.33	1.132	71.3	0.327	0.681	120.0	382.5	0.458	0.904	2.36	1.678	95.5	246.0	9.9	0.401
6.00	9.96		+/+	15.3	0.0	42.2	0.0	1.242	1.446	302.9	-13.1	13.179	0.395	7.526	164.8	5.8	67.6	99.1	2.579

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44930.0	45140.8	0.259	14.7	20.4	3.87	0.882	77.6	0.312	0.802	148.9	450.6	0.552	1.052	1.20	1.227	107.4	229.6	3.8	0.373
45140.8	45300.0	0.373	214.0	9.9	3.42	1.129	72.0	0.316	0.676	120.8	376.0	0.462	0.890	1.93	1.675	93.8	252.8	8.4	0.385
5.66	9.49		+/+	16.7	0.0	49.5	0.0	1.271	1.446	309.1	-21.4	12.864	0.425	6.905	157.4	3.8	74.2	99.7	2.510
44940.0	45145.4	0.240	21.1	22.9	3.61	0.879	79.0	0.302	0.796	151.8	450.7	0.556	1.037	0.50	1.224	106.9	236.8	1.6	0.362
45145.4	45300.0	0.362	220.6	10.6	3.57	1.125	72.7	0.308	0.672	121.8	369.7	0.465	0.878	1.46	1.672	92.3	259.6	6.6	0.373
5.36	9.15		+/+	18.5	0.0	56.8	0.0	1.301	1.446	315.3	-29.2	12.679	0.452	6.236	150.1	1.6	80.8	100.0	2.365
44950.0	45149.9	0.222	26.9	25.0	3.31	0.875	80.4	0.294	0.791	155.0	450.9	0.558	1.023	-0.18	1.221	106.4	243.8	-0.6	0.353
45149.9	45300.0	0.353	227.0	11.6	3.79	1.122	73.2	0.301	0.667	122.9	363.7	0.466	0.868	0.95	1.669	90.9	266.0	4.4	0.366
5.08	8.94		+/+	20.7	0.0	63.9	0.0	1.328	1.446	321.4	-36.0	12.614	0.475	5.576	143.4	0.6	87.2	100.1	2.172
44960.0	45154.3	0.206	31.9	26.4	2.99	0.872	81.8	0.287	0.785	158.5	451.2	0.560	1.011	-0.82	1.219	106.1	250.5	-2.8	0.347
45154.3	45300.0	0.347	233.1	12.7	4.09	1.118	73.7	0.296	0.662	124.2	358.0	0.467D	0.858	0.39	1.666	89.5	272.0	1.8	0.362
4.82	8.84		+/+	23.2	0.0	70.9	0.0	1.354	1.446	327.3	-41.9	12.665	0.493	4.967	137.6	2.8	93.2	100.0	1.955
44970.0	45158.5	0.190	35.9	27.1	2.66	0.868	83.4	0.282	0.781	162.5	451.6	0.560	1.001	-1.41	1.217	105.9	256.9	-4.8	0.342
45158.5	45300.0	0.342	238.9	14.2	4.51	1.114	74.0	0.292	0.658	125.4	352.6	0.466D	0.850	-0.26	1.663	88.3	277.6	-1.2	0.362
4.61	8.83		+/+	26.1	0.0	77.6	0.0	1.379	1.446	332.9	-46.9	12.828	0.506	4.426	132.7	4.9	98.8	100.0	1.732
44980.0	45162.4	0.177	38.4	27.1	2.33	0.864	85.0	0.279	0.777	166.8	452.2	0.560	0.993	-1.93	1.215	105.7	262.8	-6.7	0.340
45162.4	45300.0	0.340	244.2	16.1	5.06	1.110	74.3	0.289	0.653	126.8	347.6	0.464D	0.842	-1.03	1.660	87.2	282.8	-4.7	0.365
4.43	8.91		+/+	29.3	0.0	84.0	0.0	1.401	1.446	337.8	-51.0	13.112	0.512	3.956	128.6	6.7	103.9	100.1	1.514
44990.0	45166.3	0.167	39.5	26.3	2.00	0.860	86.7	0.278	0.773	171.5	452.8	0.558	0.988	-2.38	1.213	105.7	268.5	-8.2	0.340
45166.3	45300.0	0.340	249.2	18.5	5.81	1.106	74.6	0.288	0.649	128.1	342.8	0.462D	0.835	-1.98	1.656	86.2	287.5	-8.8	0.371
4.31	9.09		+/+	32.8	0.0	90.1	0.0	1.422	1.446	341.7	-54.5	13.550	0.511	3.542	125.0	8.3	108.5	100.5	1.300
45000.0	45170.6	0.163	40.7	24.8	1.63	0.855	88.4	0.281	0.770	175.8	453.8	0.554	0.986	-2.76	1.212	105.9	274.8	-9.3	0.346
45170.6	45300.0	0.345	254.5	22.3	7.08	1.101	74.9	0.287	0.643	129.7	337.5	0.459D	0.828	-3.46	1.653	85.1	292.6	-15.0	0.383
4.26	9.45		+/+	37.4	0.0	96.9	0.0	1.445	1.446	344.4	-57.8	14.337	0.496	3.123	121.4	9.6	113.0	101.8	1.054
45020.0	45156.1	0.229	3.2	15.0	3.25	0.888	100.5	0.283	0.810	209.5	444.3	0.581	1.039A	-3.99	1.235	105.3	256.4	-13.9	0.345
45156.1	45300.0	0.345	235.7	13.4	4.26	1.116	73.8	0.294	0.660	124.7	355.6	0.466D	0.854	0.11	1.665	89.0	274.6	0.5	0.362
5.17	8.83		+/+	34.1	0.0	73.9	0.0	1.365	1.446	336.4	-53.5	13.888	0.499	3.408	126.5	14.1	95.8	94.4	1.201

ARRIVAL DATE = 2445302.0

44830.0	45099.6	0.607	295.9	-15.2	5.02	0.907	53.8	0.606	0.868	139.0	473.9	0.342	1.394	7.19	1.263	126.3	152.3	9.5	0.772
45099.6	45302.0	0.772	144.1	7.5	6.32	1.161	51.6	0.621	0.714	129.8	455.5	0.271	1.158	7.70	1.700	123.3	190.4	11.2	0.983
13.37	26.98		+/+	8.4	0.0	344.3	0.0	0.981	1.441	240.4	14.0	24.741	0.099	13.706	163.5	15.2	12.7	103.5	1.262
44840.0	45103.4	0.546	305.9	-12.2	4.96	0.904	57.9	0.551	0.861	137.6	468.7	0.386	1.336	6.75	1.259	122.4	160.7	10.4	0.694
45103.4	45302.0	0.694	151.8	7.6	5.52	1.157	55.6	0.565	0.711	126.5	446.3	0.309	1.113	6.69	1.698	118.6	196.1	11.5	0.873
11.84	23.71		+/+	9.3	0.0	350.2	0.0	1.009	1.441	249.1	17.2	22.414	0.123	12.380	160.4	14.0	16.4	100.6	1.399
44850.0	45107.2	0.495	315.2	-8.8	4.91	0.901	61.3	0.505	0.854	137.0	464.6	0.422	1.285	6.29	1.255	119.3	168.9	11.0	0.630
45107.2	45302.0	0.630	159.2	7.7	4.93	1.154	58.9	0.518	0.707	124.0	437.7	0.341	1.073	5.89	1.695	114.5	201.8	11.7	0.780
10.61	20.98		+/+	10.1	0.0	356.3	0.0	1.038	1.441	257.2	18.4	20.484	0.149	11.347	159.2	13.2	20.9	98.6	1.546
44860.0	45111.1	0.452	323.9	-5.1	4.86	0.898	64.3	0.466	0.847	137.1	461.1	0.452	1.242	5.78	1.251	116.7	176.9	11.3	0.576
45111.1	45302.0	0.576	166.4	7.9	4.49	1.151	61.6	0.477	0.704	122.1	429.7	0.368	1.039	5.21	1.693	111.0	207.3	11.8	0.702
9.60	18.68		+/+	10.9	0.0	2.5	0.0	1.067	1.441	264.7	17.8	18.868	0.178	10.558	159.6	12.6	25.7	97.4	1.706
44870.0	45115.2	0.415	332.1	-1.3	4.80	0.896	66.8	0.433	0.840	137.6	458.3	0.476	1.204	5.23	1.247	114.6	184.7	11.2	0.531
45115.2	45302.0	0.531	173.5	8.1	4.16	1.148	63.9	0.442	0.700	120.8	422.0	0.390	1.009	4.63	1.691	107.9	213.0	11.8	0.635
8.76	16.74		+/+	11.5	0.0	8.9	0.0	1.096	1.441	271.8	15.6	17.504	0.210	9.960	161.5	12.0	30.8	96.8	1.879
44880.0	45119.4	0.383	339.9	2.7	4.73	0.894	69.0	0.405	0.833	138.6	456.1	0.496	1.171	4.64	1.244	112.8	192.5	10.8	0.494
45119.4	45302.0	0.494	180.5	8.3	3.91	1.145	65.8	0.413	0.696	120.0	414.6	0.409	0.984	4.10	1.689	105.2	218.7	11.6	0.579
8.07	15.09		+/+	12.1	0.0	15.5	0.0	1.126	1.441	278.5	11.9	16.352	0.243	9.490	164.6	11.2	36.1	96.8	2.061
44890.0	45123.7	0.355	347.4	6.6	4.63	0.891	70.9	0.381	0.827	140.0	454.4	0.512	1.142	4.01	1.240	111.4	200.2	10.1	0.462
45123.7	45302.0	0.462	187.5	8.5	3.74	1.142	67.4	0.387	0.692	119.6	407.4	0.424	0.961	3.62	1.687	102.7	224.5	11.3	0.531
7.48	13.69		+/+	12.6	0.0	22.3	0.0	1.156	1.441	285.0	6.8	15.382	0.277	9.077	168.4	10.3	41.5	97.3	2.238
44900.0	45128.0	0.329	354.6	10.4	4.50	0.889	72.7	0.361	0.820	141.7	453.1	0.524	1.116	3.34	1.237	110.2	207.9	8.9	0.436
45128.0	45302.0	0.436	194.5	8.9	3.62	1.139	68.8	0.366	0.689	119.5	400.5	0.436	0.941	3.16	1.684	100.5	230.5	10.7	0.490
6.96	12.51		+/+	13.3	0.0	29.2	0.0	1.186	1.441	291.2	0.4	14.577	0.312	8.654	171.0	9.0	47.2	98.0	2.387
44910.0	45132.5	0.306	1.7	14.0	4.34	0.887	74.3	0.344	0.814	143.7	452.2	0.534	1.093	2.65	1.233	109.2	215.5	7.5	0.413
45132.5	45302.0	0.413	201.4	9.2	3.56	1.135	69.9	0.348	0.685	119.8	393.6	0.446	0.923	2.71	1.682	98.5	236.7	10.0	0.456
6.52	11.52		+/+	14.1	0.0	36.3	0.0	1.217	1.441	297.4	-7.1	13.928	0.346	8.166	169.0	7.5	53.0	98.8	2.482
44920.0	45137.0	0.284	8.6	17.4	4.14	0.884	75.8	0.329	0.808	145.9	451.6	0.542	1.073	1.93	1.230	108.3	223.0	5.7	0.395
45137.0	45302.0	0.395	208.2	9.7	3.56	1.132	70.9	0.333	0.680	120.3	387.0	0.454	0.907	2.27	1.679	96.7	242.9	8.9	0.428
6.11	10.71		+/+	15.2	0.0	43.4	0.0	1.246	1.441	303.5	-15.0	13.426	0.380	7.580	163.0	5.7	59.0	99.6	2.501
44930.0	45141.5	0.264	15.3	20.4	3.89	0.882	77.3	0.316	0.802	148.5	451.3	0.548	1.055	1.21	1.227	107.7	230.3	3.7	0.379
45141.5	45302.0	0.379	214.9	10.3	3.62	1.129	71.8	0.321	0.676	121.0	380.6	0.459	0.893	1.82	1.676	95.0	249.2	7.5	0.405
5.75	10.05		+/+	16.6	0.0	50.6	0.0	1.276	1.441	309.6	-23.0	13.066	0.412	6.922	155.8	3.8	65.1	100.1	2.438
44940.0	45145.9	0.244	21.6	22.9	3.62	0.879	78.7	0.305	0.796	151.4	451.1	0.553	1.039	0.50	1.224	107.1	237.4	1.6	0.366
45145.9	45302.0	0.367	221.4	11.0	3.73	1.125	72.5	0.311	0.672	121.9	374.4	0.463	0.881	1.35	1.673	93.4	255.4	5.9	0.387
5.42	9.55		+/+	18.5	0.0	57.6	0.0	1.304	1.441	315.7	-30.4	12.836	0.441	6.235	148.8	1.6	71.2	100.3	2.307
44950.0	45150.3	0.225	27.4	24.9	3.31	0.875	80.2	0.296	0.790	154.7	451.2	0.556	1.024	-0.18	1.221	106.6	244.3	-0.6	0.356
45150.3	45302.0	0.357	227.7	11.8	3.91	1.122	73.1	0.303	0.667	122.9	368.5	0.465	0.869	0.86	1.670	92.0	261.5	3.8	0.374
5.12	9.17		+/+	20.7	0.0	64.6	0.0	1.331	1.441	321.8	-36.9	12.726	0.466	5.576	142.5	0.7	77.2	100.2	2.133
44960.0	45154.5	0.207	32.3	26.4	2.98	0.872	81.7	0.289	0.785	158.3	451.4	0.558	1.012	-0.82	1.219	106.2	250.8	-2.8	0.348
45154.5	45302.0	0.349	233.6	12.9	4.16	1.118	73.6	0.297	0.663	124.0	362.9	0.466	0.860	0.32	1.667	90.7	267.3	1.5	0.364
4.85	8.91		+/+	23.2	0.0	71.3	0.0	1.356	1.441	327.6	-42.5	12.726	0.487	4.978	137.1	2.8	83.0	100.1	1.939
44970.0	45158.6	0.190	36.1	27.1	2.65	0.868	83.3	0.283	0.781	162.4	451.7	0.560	1.001	-1.41	1.217	105.9	257.0	-4.8	0.343
45158.6	45302.0	0.343	239.2	14.1	4.43	1.115	74.0	0.292	0.659	125.2	357.7	0.466D	0.851	-0.26	1.664	89.5	272.7	-1.2	0.359
4.61	8.75		+/+	25.9	0.0	77.7	0.0	1.379	1.441	333.1	-47.1	12.827	0.504	4.459	132.5	4.9	88.4	99.9	1.743

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELV2	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COIST1	SMA SMA COIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44980.0	45162.3	0.176	38.0	27.1	2.34	0.864	85.1	0.278	0.777	167.0	452.1	0.561	0.993	-1.93	1.215	105.7	262.6	-6.7	0.339
45162.3	45307.0	0.739	244.2	15.6	4.90	1.111	74.3	0.289	0.654	126.4	353.0	0.466D	0.843	-0.89	1.662	88.4	277.6	-4.2	0.357
4.42	8.68		+/+	28.8	0.0	83.7	0.0	1.400	1.441	338.0	-50.8	13.021	0.515	4.021	128.8	6.7	93.3	99.8	1.556
44990.0	45165.5	0.165	37.7	26.2	2.05	0.861	87.1	0.276	0.774	172.2	452.4	0.561	0.987	-2.37	1.214	105.6	267.6	-8.2	0.337
45165.5	45302.0	0.337	248.6	17.3	5.38	1.108	74.6	0.286	0.651	127.5	348.9	0.464D	0.837	-1.57	1.659	87.5	281.8	-7.3	0.357
4.28	8.70		+/+	31.7	0.0	88.9	0.0	1.418	1.441	342.0	-53.7	13.299	0.520	3.661	125.9	8.3	97.4	99.9	1.385
45000.0	45168.0	0.160	34.4	24.2	1.83	0.858	89.4	0.275	0.773	178.5	452.4	0.561	0.985	-2.74	1.213	105.5	271.4	-9.5	0.337
45168.0	45302.0	0.337	251.7	18.8	5.85	1.106	74.8	0.285	0.648	128.3	345.9	0.463D	0.833	-2.17	1.657	86.9	284.9	-10.1	0.359
4.22	8.76		+/+	34.3	0.0	92.8	0.0	1.431	1.441	344.8	-55.8	13.615	0.521	3.388	123.8	9.6	100.4	100.0	1.244
45010.0	45167.9	0.166	25.3	20.8	1.84	0.860	92.9	0.274	0.777	187.7	451.3	0.564	0.990A	-3.06	1.216	105.4	271.7	-10.7	0.337
45167.9	45302.0	0.337	251.6	18.7	5.83	1.106	74.8	0.285	0.648	128.3	345.9	0.463D	0.833	-2.15	1.657	86.9	284.8	-9.9	0.359
4.30	8.75		+/+	35.5	0.0	92.6	0.0	1.431	1.441	345.7	-56.3	13.760	0.521	3.280	123.4	10.8	100.3	99.3	1.188
45020.0	45157.6	0.223	4.9	15.2	3.05	0.885	100.0	0.282	0.806	207.9	445.1	0.579	1.034A	-3.88	1.233	105.4	258.4	-13.5	0.344
45157.6	45302.0	0.344	237.9	13.8	4.40	1.116	73.9	0.293	0.660	124.9	358.9	0.466D	0.853	-0.12	1.665	89.7	271.4	-0.5	0.360
5.08	8.78		+/+	34.0	0.0	76.3	0.0	1.374	1.441	337.9	-53.9	13.859	0.500	3.415	126.1	13.7	87.1	94.9	1.208

ARRIVAL DATE = 2445304.0

44830.0	45101.1	0.649	295.0	-15.1	5.75	0.907	51.1	0.641	0.868	140.6	477.6	0.312	1.425	7.85	1.263	128.9	152.7	9.3	0.826
45101.1	45304.0	0.827	144.9	7.8	7.34	1.160	48.8	0.658	0.713	132.5	461.4	0.244	1.183	8.41	1.703	126.6	192.2	10.6	1.092
14.45	30.20		+/+	7.9	0.0	346.6	0.0	0.992	1.433	240.6	11.6	26.371	0.087	14.547	165.5	16.6	10.8	105.6	1.175
44840.0	45104.8	0.581	305.3	-12.1	5.55	0.903	55.7	0.582	0.861	138.7	472.0	0.360	1.361	7.27	1.259	124.6	161.4	10.2	0.739
45104.8	45304.0	0.739	152.8	7.9	6.30	1.155	53.3	0.597	0.710	128.7	451.8	0.286	1.133	7.16	1.701	121.3	197.8	10.8	0.968
12.71	26.53		+/+	8.7	0.0	352.4	0.0	1.019	1.433	249.6	15.1	23.749	0.109	13.124	162.2	15.0	13.4	102.4	1.316
44850.0	45108.6	0.524	314.9	-8.8	5.38	0.900	59.5	0.531	0.853	137.7	467.3	0.400	1.306	6.69	1.255	121.0	169.7	10.8	0.666
45108.6	45304.0	0.667	160.4	8.1	5.56	1.153	57.0	0.545	0.706	125.8	442.9	0.321	1.091	6.20	1.699	116.9	203.3	10.9	0.864
11.30	23.46		+/+	9.6	0.0	358.5	0.0	1.048	1.433	257.8	16.5	21.583	0.133	11.981	160.8	13.9	17.2	100.2	1.464
44860.0	45112.5	0.476	323.7	-5.1	5.24	0.898	62.8	0.488	0.846	137.4	463.5	0.434	1.259	6.09	1.251	118.2	177.8	11.1	0.607
45112.5	45304.0	0.607	167.7	8.2	5.01	1.150	60.1	0.500	0.702	123.6	434.5	0.351	1.053	5.41	1.696	113.0	208.6	10.9	0.776
10.16	20.87		+/+	10.3	0.0	4.6	0.0	1.076	1.433	265.5	16.0	19.777	0.161	11.096	161.2	13.1	21.6	98.8	1.625
44870.0	45116.5	0.435	332.1	-1.2	5.11	0.895	65.5	0.451	0.840	137.7	460.4	0.461	1.218	5.47	1.247	115.8	185.7	11.1	0.557
45116.5	45304.0	0.557	174.8	8.4	4.59	1.147	62.6	0.462	0.699	122.0	426.7	0.376	1.021	4.74	1.694	109.7	213.8	10.8	0.701
9.22	18.67		+/+	11.0	0.0	11.0	0.0	1.105	1.433	272.7	13.8	18.262	0.191	10.411	163.0	12.3	26.2	98.0	1.798
44880.0	45120.6	0.400	340.0	2.7	4.97	0.893	67.9	0.420	0.833	138.5	457.9	0.483	1.183	4.82	1.244	113.8	193.5	10.7	0.515
45120.6	45304.0	0.515	181.9	8.6	4.29	1.144	64.7	0.429	0.695	121.0	419.2	0.397	0.993	4.15	1.692	106.8	219.1	10.6	0.637
8.44	16.80		+/+	11.6	0.0	17.5	0.0	1.135	1.433	279.4	10.1	16.986	0.223	9.859	165.9	11.4	30.9	97.9	1.977
44890.0	45124.9	0.369	347.6	6.6	4.82	0.891	70.0	0.394	0.826	139.7	456.0	0.501	1.152	4.14	1.240	112.2	201.3	9.9	0.480
45124.9	45304.0	0.480	188.9	8.9	4.06	1.141	66.5	0.401	0.691	120.4	411.9	0.414	0.969	3.61	1.690	104.2	224.4	10.2	0.583
7.78	15.20		+/+	12.3	0.0	24.1	0.0	1.164	1.433	285.9	4.9	15.917	0.257	9.366	169.3	10.4	35.8	98.2	2.150
44900.0	45129.1	0.342	355.0	10.4	4.64	0.889	71.9	0.372	0.820	141.3	454.5	0.515	1.124	3.44	1.236	110.9	208.9	8.8	0.451
45129.1	45304.0	0.451	195.8	9.2	3.91	1.138	68.0	0.378	0.687	120.2	404.9	0.428	0.947	3.11	1.687	101.9	229.8	9.6	0.536
7.21	13.93		+/+	13.0	0.0	31.0	0.0	1.194	1.433	292.2	-1.5	15.030	0.292	8.866	170.8	9.1	40.9	98.8	2.295
44910.0	45133.5	0.317	2.2	14.0	4.44	0.886	73.6	0.353	0.813	143.2	453.4	0.526	1.100	2.71	1.233	109.8	216.5	7.4	0.426
45133.5	45304.0	0.426	202.7	9.5	3.81	1.135	69.3	0.358	0.683	120.3	398.0	0.439	0.928	2.63	1.685	99.8	235.3	8.9	0.496
6.71	12.67		+/+	13.8	0.0	37.9	0.0	1.224	1.433	298.3	-8.8	14.313	0.327	8.306	167.7	7.5	46.1	99.5	2.387
44920.0	45137.9	0.293	9.1	17.4	4.20	0.884	75.2	0.336	0.807	145.4	452.6	0.536	1.078	1.97	1.230	108.8	223.9	5.7	0.405
45137.9	45304.0	0.405	209.4	10.0	3.78	1.131	70.4	0.341	0.679	120.7	391.4	0.448	0.911	2.17	1.682	97.9	240.9	7.9	0.462
6.27	11.69		+/+	15.0	0.0	44.9	0.0	1.253	1.433	304.4	-16.6	13.753	0.361	7.662	161.5	5.8	51.5	100.1	2.406
44930.0	45142.4	0.271	15.9	20.4	3.93	0.881	76.7	0.323	0.801	148.0	452.1	0.543	1.059	1.23	1.227	108.1	231.3	3.7	0.388
45142.4	45304.0	0.388	216.1	10.5	3.80	1.128	71.4	0.327	0.675	121.3	385.0	0.454	0.896	1.70	1.680	96.1	246.6	6.6	0.433
5.88	10.86		+/+	16.5	0.0	52.0	0.0	1.281	1.433	310.5	-24.3	13.343	0.394	6.970	154.5	3.8	57.0	100.5	2.352
44940.0	45146.8	0.250	22.4	22.9	3.63	0.878	78.3	0.311	0.795	150.8	451.9	0.548	1.042	0.51	1.224	107.4	238.4	1.6	0.373
45146.8	45304.0	0.373	222.6	11.2	3.88	1.125	72.2	0.316	0.671	122.1	378.8	0.459	0.883	1.23	1.677	94.5	252.3	5.0	0.410
5.52	10.19		+/+	18.4	0.0	59.0	0.0	1.309	1.433	316.6	-31.4	13.066	0.425	6.263	147.8	1.7	62.5	100.6	2.235
44950.0	45151.0	0.230	28.2	24.9	3.31	0.875	79.8	0.300	0.790	154.1	451.8	0.553	1.027	-0.18	1.221	106.9	245.1	-0.6	0.362
45151.0	45304.0	0.362	228.7	12.0	4.02	1.122	72.8	0.307	0.667	123.0	373.0	0.462	0.872	0.74	1.674	93.0	257.8	3.2	0.391
5.19	9.66		+/+	20.6	0.0	65.7	0.0	1.335	1.433	322.6	-37.6	12.907	0.453	5.596	141.8	0.9	68.0	100.4	2.080
44960.0	45155.2	0.211	33.2	26.3	2.97	0.871	81.4	0.292	0.785	157.8	451.9	0.556	1.014	-0.83	1.219	106.4	251.6	-2.8	0.352
45155.2	45304.0	0.353	234.6	12.9	4.23	1.118	73.4	0.300	0.663	124.1	367.5	0.464	0.861	0.23	1.671	91.7	263.2	1.0	0.377
4.90	9.25		+/+	23.1	0.0	72.3	0.0	1.360	1.433	328.4	-42.9	12.859	0.476	5.004	136.7	2.9	73.3	100.2	1.908
44970.0	45159.0	0.193	36.9	27.1	2.63	0.867	83.1	0.285	0.780	161.9	452.1	0.558	1.003	-1.42	1.216	106.1	257.6	-4.8	0.345
45159.0	45304.0	0.346	240.0	14.0	4.49	1.115	73.8	0.294	0.659	125.2	362.4	0.465	0.852	-0.31	1.668	90.5	268.2	-1.4	0.366
4.65	8.96		+/+	25.7	0.0	78.5	0.0	1.382	1.433	333.8	-47.2	12.906	0.496	4.496	132.4	4.9	78.4	99.9	1.734
44980.0	45162.6	0.177	38.7	27.1	2.32	0.864	84.9	0.280	0.777	166.7	452.3	0.559	0.994	-1.93	1.215	105.8	263.0	-6.7	0.341
45162.6	45304.0	0.341	244.8	15.3	4.82	1.112	74.2	0.290	0.655	126.2	357.9	0.465D	0.845	-0.88	1.666	89.5	272.8	-4.1	0.359
4.44	8.76		+/+	28.4	0.0	84.2	0.0	1.402	1.433	338.7	-50.7	13.035	0.510	4.075	129.0	6.7	83.0	99.7	1.569
44990.0	45165.6	0.165	37.9	26.2	2.04	0.860	87.0	0.276	0.774	172.2	452.4	0.560	0.988	-2.37	1.214	105.6	267.7	-8.2	0.338
45165.6	45304.0	0.338	248.9	16.6	5.18	1.109	74.5	0.287	0.651	127.2	354.0	0.464D	0.839	-1.43	1.663	88.7	276.7	-6.7	0.356
4.29	8.66		+/+	31.0	0.0	89.0	0.0	1.419	1.433	342.7	-53.4	13.230	0.519	3.738	126.3	8.3	86.9	99.6	1.422
45000.0	45167.7	0.159	33.7	24.1	1.85	0.859	89.6	0.274	0.773	178.9	452.2	0.562	0.985	-2.74	1.214	105.5	271.0	-9.6	0.336
45167.7	45304.0	0.336	251.6	17.7	5.49	1.107	74.7	0.286	0.649	127.9	351.4	0.464D	0.835	-1.87	1.662	88.1	279.4	-8.8	0.354
4.22	8.62		+/+	33.3	0.0	92.3	0.0	1.430	1.433	345.5	-55.1	13.450	0.524	3.492	124.5	9.7	89.6	99.5	1.305
45010.0	45167.5	0.166	24.4	20.6	1.88	0.861	93.0	0.274	0.778	188.1	451.1	0.565	0.990A	-3.07	1.216	105.4	271.1	-10.8	0.336
45167.5	45304.0	0.336	251.3	17.6	5.46	1.107	74.7	0.286	0.649	127.8	351.7	0.464D	0.835	-1.82	1.662	88.2	279.1	-8.6	0.355
4.30	8.63		+/+	34.4	0.0	92.0	0.0	1.429	1.433	346.3	-55.6	13.595	0.523	3.379	124.1	10.8	89.3	98.8	1.245

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAMI	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
45020.0	45160.2	0.213	8.2	15.7	2.73	0.879	99.1	0.281	0.800	205.1	446.4	0.575	1.025A	-3.72	1.230	105.4	261.9	-12.9	0.344
45160.2	45304.0	0.344	241.6	14.4	4.60	1.114	74.0	0.293	0.657	125.5	360.8	0.465	0.850	-0.50	1.667	90.2	269.8	-2.3	0.364
4.94	8.88		+/+	33.9	0.0	80.4	0.0	1.389	1.433	340.7	-54.2	13.831	0.501	3.428	125.8	13.0	80.0	95.7	1.216
								ARRIVAL DATE = 2445306.0											
44840.0	45106.3	0.622	304.5	-12.2	6.27	0.903	53.1	0.616	0.861	140.0	475.6	0.331	1.391	7.92	1.259	127.1	161.9	10.1	0.791
45106.3	45306.0	0.791	153.8	8.1	7.16	1.155	50.7	0.634	0.708	131.3	457.5	0.259	1.157	7.71	1.707	124.4	199.7	10.1	1.074
13.74	29.68		+/+	8.2	0.0	354.8	0.0	1.331	1.423	250.1	13.7	25.316	0.095	13.910	163.5	16.3	11.0	104.3	1.222
44850.0	45110.0	0.558	314.4	-8.8	5.96	0.900	57.4	0.560	0.853	138.5	470.5	0.375	1.331	7.19	1.255	123.1	170.4	10.7	0.710
45110.0	45306.0	0.710	161.5	8.3	6.22	1.152	54.9	0.576	0.705	127.9	448.2	0.299	1.111	6.54	1.705	119.5	205.0	10.2	0.958
12.14	26.22		+/+	9.1	0.0	0.8	0.0	1.058	1.423	258.6	15.2	22.880	0.118	12.650	162.0	14.8	14.0	101.8	1.370
44860.0	45113.9	0.505	323.5	-5.1	5.70	0.898	61.0	0.513	0.846	137.9	466.3	0.412	1.280	6.48	1.251	119.9	178.7	11.0	0.643
45113.9	45306.0	0.643	169.0	8.4	5.54	1.149	58.3	0.527	0.701	125.3	439.6	0.332	1.070	5.62	1.703	115.3	210.1	10.1	0.859
10.84	23.31		+/+	9.8	0.0	6.9	0.0	1.087	1.423	266.4	14.7	20.857	0.143	11.665	162.2	13.7	17.8	100.1	1.530
44870.0	45117.9	0.460	332.0	-1.2	5.48	0.895	64.0	0.472	0.839	137.9	462.8	0.443	1.236	5.77	1.247	117.2	186.7	10.9	0.587
45117.9	45306.0	0.587	176.3	8.6	5.04	1.146	61.1	0.485	0.697	123.5	431.5	0.359	1.035	4.85	1.700	111.7	215.1	9.9	0.775
9.78	20.84		+/+	10.5	0.0	13.2	0.0	1.115	1.423	273.7	12.5	19.165	0.172	10.890	164.0	12.7	22.0	99.3	1.701
44880.0	45122.0	0.421	340.1	2.7	5.26	0.893	66.6	0.438	0.832	138.5	460.0	0.468	1.197	5.04	1.243	115.0	194.6	10.6	0.540
45122.0	45306.0	0.540	183.4	8.8	4.66	1.143	63.5	0.449	0.694	122.2	423.8	0.382	1.005	4.19	1.698	108.6	220.0	9.6	0.703
8.89	18.73		+/+	11.2	0.0	19.6	0.0	1.144	1.423	280.5	8.8	17.748	0.203	10.247	166.8	11.7	26.3	99.0	1.876
44890.0	45126.1	0.387	347.8	6.6	5.04	0.891	68.9	0.409	0.826	139.5	457.8	0.488	1.164	4.31	1.240	113.2	202.4	9.8	0.501
45126.1	45306.0	0.501	190.4	9.1	4.38	1.140	65.5	0.418	0.690	121.4	416.4	0.402	0.978	3.60	1.696	105.8	224.9	9.2	0.641
8.15	16.92		+/+	11.9	0.0	26.2	0.0	1.173	1.423	287.0	3.6	16.563	0.236	9.679	169.8	10.5	30.8	99.2	2.045
44900.0	45130.4	0.357	355.4	10.4	4.81	0.888	70.9	0.385	0.819	140.9	456.1	0.504	1.134	3.56	1.236	111.8	210.1	8.7	0.469
45130.4	45306.0	0.469	197.4	9.4	4.18	1.137	67.2	0.392	0.686	121.0	409.3	0.417	0.955	3.05	1.693	103.3	229.9	8.6	0.588
7.52	15.35		+/+	12.6	0.0	33.0	0.0	1.203	1.423	293.3	-2.8	15.582	0.270	9.109	170.4	9.2	35.4	99.7	2.187
44910.0	45134.7	0.329	2.7	14.0	4.56	0.886	72.8	0.364	0.813	142.7	454.8	0.517	1.108	2.79	1.233	110.5	217.7	7.3	0.441
45134.7	45306.0	0.441	204.2	9.7	4.05	1.133	68.6	0.370	0.682	120.9	402.4	0.430	0.934	2.54	1.691	101.1	234.8	7.8	0.542
6.96	14.01		+/+	13.5	0.0	39.8	0.0	1.232	1.423	299.4	-10.1	14.787	0.305	8.479	166.7	7.6	40.1	100.2	2.278
44920.0	45139.1	0.304	9.8	17.3	4.28	0.883	74.5	0.346	0.806	144.8	453.8	0.527	1.085	2.02	1.230	109.5	225.2	5.6	0.418
45139.1	45306.0	0.418	211.0	10.1	3.98	1.130	69.8	0.351	0.678	121.2	395.7	0.440	0.916	2.05	1.688	99.1	239.9	6.8	0.502
6.48	12.86		+/+	14.8	0.0	46.8	0.0	1.260	1.423	305.5	-17.7	14.162	0.339	7.785	160.5	5.8	44.9	100.7	2.301
44930.0	45143.5	0.281	16.7	20.3	3.98	0.881	76.1	0.331	0.800	147.3	453.2	0.536	1.065	1.26	1.227	108.6	232.4	3.7	0.398
45143.5	45306.0	0.399	217.6	10.7	3.97	1.127	70.8	0.336	0.674	121.7	389.3	0.448	0.901	1.57	1.686	97.2	245.0	5.6	0.469
6.04	11.88		+/+	16.3	0.0	53.7	0.0	1.288	1.423	311.6	-25.2	13.692	0.373	7.048	153.6	3.9	49.8	100.9	2.256
44940.0	45147.8	0.258	23.3	22.8	3.65	0.877	77.7	0.317	0.795	150.2	452.8	0.542	1.047	0.52	1.224	107.8	239.5	1.6	0.382
45147.8	45306.0	0.383	223.9	11.3	4.02	1.124	71.7	0.323	0.670	122.4	383.2	0.453	0.887	1.10	1.683	95.6	250.0	4.2	0.440
5.65	11.07		+/+	18.2	0.0	60.5	0.0	1.315	1.423	317.7	-32.0	13.360	0.405	6.317	147.2	1.9	54.7	100.9	2.154
44950.0	45152.0	0.237	29.3	24.9	3.30	0.874	79.3	0.306	0.789	153.4	452.6	0.547	1.031	-0.19	1.221	107.2	246.3	-0.6	0.369
45152.0	45306.0	0.369	230.1	12.0	4.13	1.121	72.5	0.313	0.666	123.3	377.3	0.457	0.874	0.60	1.680	94.1	255.1	2.4	0.416
5.30	10.39		+/+	20.4	0.0	67.3	0.0	1.341	1.423	323.7	-38.1	13.155	0.434	5.643	141.4	1.2	59.7	100.6	2.017
44960.0	45156.1	0.216	34.5	26.3	2.95	0.870	80.9	0.297	0.784	157.0	452.6	0.551	1.017	-0.84	1.218	106.7	252.7	-2.7	0.359
45156.1	45306.0	0.359	235.9	12.9	4.29	1.118	73.1	0.305	0.662	124.3	371.8	0.460	0.864	0.10	1.678	92.8	260.0	0.4	0.397
4.98	9.84		+/+	22.8	0.0	73.8	0.0	1.365	1.423	329.6	-43.1	13.058	0.460	5.049	136.4	2.9	64.6	100.3	1.864
44970.0	45159.9	0.197	38.3	27.1	2.60	0.867	82.7	0.289	0.780	161.2	452.6	0.554	1.005	-1.43	1.216	106.3	258.6	-4.8	0.350
45159.9	45306.0	0.350	241.2	13.9	4.51	1.114	73.6	0.298	0.658	125.3	366.8	0.462	0.854	-0.41	1.675	91.6	264.7	-1.8	0.382
4.70	9.42		+/+	25.4	0.0	79.8	0.0	1.387	1.423	335.0	-47.3	13.054	0.482	4.545	132.4	4.9	69.3	100.0	1.710
44980.0	45163.3	0.180	40.2	27.1	2.28	0.863	84.6	0.282	0.776	166.0	452.7	0.557	0.995	-1.95	1.214	106.0	264.0	-6.6	0.344
45163.3	45306.0	0.344	246.0	15.0	4.78	1.111	74.0	0.293	0.654	126.3	362.3	0.462	0.846	-0.94	1.672	90.5	268.9	-4.2	0.372
4.47	9.11		+/+	28.0	0.0	85.3	0.0	1.406	1.423	339.9	-50.6	13.128	0.500	4.131	129.1	6.8	73.5	99.7	1.564
44990.0	45166.2	0.167	39.3	26.3	2.00	0.860	86.8	0.278	0.773	171.5	452.8	0.558	0.988	-2.38	1.213	105.7	268.5	-8.2	0.340
45166.2	45306.0	0.340	249.9	16.1	5.08	1.109	74.4	0.290	0.651	127.2	358.6	0.462D	0.840	-1.43	1.670	89.7	272.5	-6.6	0.364
4.31	8.91		+/+	30.5	0.0	90.0	0.0	1.422	1.423	344.0	-53.1	13.264	0.512	3.803	126.6	8.3	77.2	99.5	1.434
45000.0	45168.2	0.160	35.0	24.3	1.81	0.858	89.3	0.275	0.773	178.3	452.5	0.560	0.985	-2.74	1.213	105.6	271.7	-9.5	0.338
45168.2	45306.0	0.338	252.6	17.0	5.32	1.107	74.6	0.288	0.649	127.9	356.1	0.462D	0.836	-1.81	1.669	89.1	275.0	-8.4	0.361
4.22	8.80		+/+	32.6	0.0	93.2	0.0	1.433	1.423	346.9	-54.8	13.433	0.518	3.564	125.0	9.6	79.7	99.3	1.329
45010.0	45168.3	0.166	26.2	20.9	1.81	0.860	92.7	0.275	0.776	187.2	451.5	0.563	0.990A	-3.06	1.216	105.5	272.3	-10.7	0.338
45168.3	45306.0	0.338	252.7	17.1	5.33	1.107	74.6	0.288	0.649	127.9	356.0	0.462D	0.836	-1.83	1.669	89.1	275.1	-8.5	0.360
4.29	8.79		+/+	33.8	0.0	93.3	0.0	1.433	1.423	347.9	-55.4	13.582	0.518	3.438	124.4	10.7	79.8	98.7	1.264
45020.0	45163.3	0.203	12.4	16.4	2.38	0.873	98.0	0.281	0.793	201.8	448.0	0.570	1.016A	-3.56	1.226	105.5	266.0	-12.3	0.344
45163.3	45306.0	0.344	246.0	15.0	4.78	1.111	74.0	0.293	0.654	126.3	362.3	0.462	0.846	-0.93	1.672	90.5	268.9	-4.2	0.372
4.79	9.11		+/+	33.7	0.0	85.3	0.0	1.406	1.423	344.1	-54.4	13.830	0.499	3.446	125.6	12.3	73.5	96.5	1.221
								ARRIVAL DATE = 2445308.0											
44850.0	45111.6	0.598	313.7	-8.9	6.66	0.900	54.9	0.594	0.853	139.7	474.0	0.346	1.360	7.81	1.255	125.6	171.1	10.5	0.760
45111.6	45308.0	0.760	162.6	8.3	6.95	1.151	52.3	0.612	0.703	130.3	453.9	0.273	1.134	6.94	1.714	122.5	207.0	9.5	1.063
13.13	29.33		+/+	8.6	0.0	3.2	0.0	1.070	1.411	259.3	14.6	24.403	0.103	13.361	162.5	16.0	11.1	103.4	1.267
44860.0	45115.4	0.538	323.1	-5.2	6.26	0.897	58.9	0.542	0.846	138.6	469.4	0.387	1.304	6.96	1.251	121.9	179.5	10.8	0.685
45115.4	45308.0	0.685	170.3	8.5	6.10	1.148	55.2	0.558	0.699	127.3	444.8	0.309	1.090	5.85	1.712	117.9	212.0	9.3	0.952
11.65	26.05		+/+	9.3	0.0	9.3	0.0	1.098	1.411	267.4	14.1	22.128	0.126	12.274	162.8	14.6	14.3	101.6	1.424
44870.0	45119.4	0.488	331.8	-1.3	5.92	0.895	62.2	0.497	0.839	138.2	465.5	0.421	1.256	6.13	1.247	118.9	187.7	10.8	0.622
45119.4	45308.0	0.622	177.7	8.7	5.49	1.144	59.3	0.511	0.696	125.1	436.4	0.340	1.052	4.97	1.709	113.9	216.8	9.1	0.857
10.44	23.27		+/+	10.1	0.0	15.5	0.0	1.126	1.411	274.8	11.9	20.233	0.153	11.406	164.5	13.3	18.1	100.5	1.592

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44880.0	45123.4	0.445	340.1	2.7	5.61	0.892	65.1	0.460	0.832	138.5	462.4	0.449	1.214	5.32	1.243	116.5	195.7	10.4	0.570
45123.4	45308.0	0.570	184.9	8.9	5.03	1.141	62.0	0.472	0.692	123.6	428.5	0.366	1.018	4.22	1.707	110.5	221.5	8.7	0.777
9.44	20.89		+/+	10.7	0.0	21.9	0.0	1.154	1.411	281.7	8.0	18.651	0.182	10.684	167.3	12.1	22.1	100.1	1.765
44890.0	45127.6	0.407	348.1	6.6	5.31	0.890	67.6	0.428	0.825	139.3	459.9	0.472	1.178	4.51	1.240	114.5	203.6	9.7	0.526
45127.6	45308.0	0.527	192.0	9.1	4.68	1.138	64.2	0.438	0.688	122.5	420.9	0.387	0.989	3.57	1.705	107.5	226.1	8.2	0.707
8.60	18.84		+/+	11.4	0.0	28.5	0.0	1.183	1.411	288.3	2.8	17.331	0.214	10.037	170.1	10.8	26.2	100.2	1.931
44900.0	45131.8	0.374	355.7	10.4	5.01	0.888	69.8	0.401	0.818	140.6	458.0	0.491	1.146	3.70	1.236	112.8	211.4	8.6	0.490
45131.8	45308.0	0.490	199.0	9.4	4.43	1.135	66.1	0.409	0.684	122.0	413.7	0.404	0.964	2.99	1.702	104.9	230.6	7.6	0.647
7.89	17.08		+/+	12.2	0.0	35.2	0.0	1.212	1.411	294.6	-3.7	16.241	0.247	9.388	170.2	9.4	30.4	100.5	2.069
44910.0	45136.1	0.345	3.2	14.0	4.71	0.885	71.8	0.378	0.812	142.2	456.4	0.505	1.118	2.89	1.233	111.4	219.0	7.2	0.459
45136.1	45308.0	0.459	205.9	9.8	4.26	1.132	67.7	0.385	0.680	121.8	406.7	0.419	0.942	2.44	1.700	102.5	235.2	6.8	0.595
7.27	15.55		+/+	13.2	0.0	42.0	0.0	1.241	1.411	300.8	-10.9	15.355	0.281	8.694	166.1	7.8	34.7	101.0	2.160
44920.0	45140.4	0.318	10.5	17.3	4.38	0.883	73.6	0.358	0.806	144.2	455.3	0.517	1.094	2.09	1.229	110.2	226.5	5.6	0.433
45140.4	45308.0	0.433	212.6	10.2	4.16	1.129	69.0	0.364	0.677	121.9	400.0	0.430	0.923	1.93	1.698	100.4	239.7	5.9	0.550
6.73	14.24		+/+	14.5	0.0	48.8	0.0	1.269	1.411	306.9	-18.4	14.652	0.315	7.942	159.8	6.0	39.0	101.3	2.188
44930.0	45144.7	0.292	17.6	20.3	4.03	0.880	75.3	0.341	0.800	146.6	454.5	0.527	1.072	1.29	1.226	109.2	233.8	3.6	0.412
45144.7	45308.0	0.412	219.2	10.6	4.12	1.126	70.2	0.347	0.673	122.3	393.5	0.439	0.906	1.43	1.695	98.5	244.3	4.7	0.511
6.25	13.10		+/+	16.0	0.0	55.7	0.0	1.296	1.411	313.1	-25.7	14.116	0.349	7.164	153.1	4.1	43.4	101.4	2.153
44940.0	45149.0	0.268	24.4	22.8	3.67	0.877	77.0	0.326	0.794	149.3	453.9	0.535	1.053	0.53	1.223	108.4	240.9	1.6	0.394
45149.0	45308.0	0.394	225.6	11.2	4.14	1.123	71.2	0.333	0.668	122.9	387.4	0.446	0.891	0.94	1.692	96.7	248.9	3.3	0.477
5.82	12.14		+/+	18.0	0.0	62.5	0.0	1.323	1.411	319.2	-32.4	13.727	0.382	6.410	146.8	2.3	47.9	101.2	2.066
44950.0	45153.2	0.245	30.6	24.8	3.29	0.873	78.7	0.313	0.788	152.5	453.6	0.541	1.035	-0.19	1.221	107.7	247.6	-0.6	0.379
45153.2	45308.0	0.379	231.7	11.9	4.21	1.120	72.0	0.321	0.664	123.7	381.5	0.451	0.878	0.45	1.690	95.2	253.4	1.7	0.449
5.43	11.32		+/+	20.1	0.0	69.1	0.0	1.348	1.411	325.2	-38.3	13.465	0.413	5.718	141.2	1.6	52.4	100.9	1.947
44960.0	45157.2	0.223	36.0	26.2	2.92	0.870	80.4	0.303	0.783	156.1	453.4	0.546	1.020	-0.85	1.218	107.1	254.0	-2.7	0.367
45157.2	45308.0	0.367	237.5	12.7	4.35	1.116	72.7	0.312	0.660	124.6	376.1	0.454	0.866	-0.04	1.687	93.8	257.9	-0.2	0.426
5.09	10.65		+/+	22.5	0.0	75.5	0.0	1.371	1.411	331.1	-43.2	13.315	0.440	5.117	136.4	3.1	56.8	100.5	1.813
44970.0	45161.0	0.203	40.1	27.0	2.55	0.866	82.2	0.294	0.779	160.2	453.4	0.550	1.007	-1.45	1.216	106.6	260.0	-4.7	0.357
45161.0	45308.0	0.357	242.8	13.6	4.53	1.113	73.3	0.304	0.657	125.6	371.0	0.457	0.857	-0.54	1.684	92.6	262.1	-2.3	0.406
4.78	10.10		+/+	25.1	0.0	81.6	0.0	1.393	1.411	336.6	-47.2	13.261	0.464	4.611	132.5	5.0	61.0	100.1	1.676
44980.0	45164.4	0.185	42.3	27.1	2.21	0.862	84.1	0.287	0.775	164.9	453.4	0.553	0.997	-1.96	1.214	106.2	265.3	-6.6	0.350
45164.4	45308.0	0.350	247.5	14.6	4.76	1.110	73.7	0.299	0.653	126.5	366.5	0.458	0.848	-1.04	1.682	91.5	266.0	-4.5	0.392
4.53	9.68		+/+	27.6	0.0	87.1	0.0	1.412	1.411	341.6	-50.4	13.285	0.484	4.197	129.3	6.8	65.0	99.8	1.547
44990.0	45167.3	0.170	41.8	26.3	1.93	0.859	86.3	0.281	0.772	170.5	453.4	0.555	0.989	-2.40	1.213	105.9	269.9	-8.1	0.345
45167.3	45308.0	0.345	251.5	15.7	5.01	1.108	74.1	0.295	0.650	127.4	362.8	0.459	0.842	-1.51	1.680	90.6	269.4	-6.7	0.381
4.34	9.38		+/+	29.9	0.0	91.7	0.0	1.428	1.411	345.8	-52.8	13.371	0.499	3.871	127.0	8.3	68.4	99.6	1.431
45000.0	45169.3	0.161	37.7	24.5	1.72	0.857	88.9	0.278	0.771	177.1	453.2	0.557	0.986	-2.75	1.213	105.7	273.2	-9.4	0.342
45169.3	45308.0	0.342	254.3	16.5	5.22	1.106	74.3	0.292	0.648	128.1	360.2	0.459	0.837	-1.88	1.678	90.0	271.8	-8.4	0.375
4.24	9.20		+/+	32.0	0.0	95.0	0.0	1.439	1.411	348.8	-54.4	13.497	0.508	3.631	125.4	9.6	70.9	99.3	1.336
45010.0	45169.8	0.164	29.6	21.4	1.68	0.857	92.1	0.277	0.774	185.6	452.3	0.560	0.989A	-3.05	1.215	105.6	274.3	-10.5	0.341
45169.8	45308.0	0.341	254.9	16.7	5.28	1.106	74.4	0.291	0.647	128.3	359.6	0.4590	0.836	-1.96	1.678	89.9	272.3	-8.8	0.374
4.28	9.17		+/+	33.3	0.0	95.7	0.0	1.441	1.411	350.2	-55.1	13.637	0.509	3.491	124.7	10.6	71.5	98.8	1.269
45020.0	45166.5	0.193	17.3	17.3	2.05	0.867	96.9	0.281	0.787	198.3	449.7	0.565	1.008A	-3.44	1.222	105.7	270.3	-11.8	0.346
45166.5	45308.0	0.346	250.5	15.4	4.94	1.109	74.0	0.296	0.651	127.2	363.8	0.459	0.843	-1.38	1.680	90.9	268.5	-6.1	0.384
4.65	9.46		+/+	33.5	0.0	90.5	0.0	1.424	1.411	347.9	-54.5	13.864	0.495	3.469	125.4	11.8	67.5	97.3	1.222
45030.0	45150.5	0.310	359.6	15.7	5.05	0.919	106.2	0.320	0.852	224.4	440.2	0.579	1.124A	-5.77	1.258	106.6	249.1	-18.2	0.388
45150.5	45308.0	0.388	227.8	11.5	4.16	1.122	71.5	0.328	0.667	123.2	385.2	0.448	0.886	0.76	1.691	96.2	250.6	2.8	0.466
6.58	11.83	955.6	+/+	36.4	4.7	64.9	0.0	1.332	1.411	337.3	-54.7	15.287	0.393	3.670	124.8	18.7	49.5	88.6	0.867

ARRIVAL DATE = 2445310.0

44850.0	45113.2	0.644	312.9	-9.0	7.53	0.900	52.0	0.632	0.853	141.2	478.0	0.314	1.392	8.61	1.255	128.5	171.6	10.3	0.819
45113.2	45310.0	0.819	163.6	8.2	7.74	1.150	49.3	0.653	0.702	133.2	460.0	0.243	1.160	7.41	1.726	126.0	209.0	8.8	1.181
14.32	32.84		+/+	8.1	0.0	5.7	0.0	1.081	1.396	260.1	14.8	26.183	0.088	14.117	162.4	17.4	9.0	105.1	1.159
44860.0	45117.0	0.577	322.5	-5.3	6.93	0.897	56.4	0.575	0.845	139.6	472.8	0.359	1.332	7.55	1.251	124.3	180.3	10.7	0.734
45117.0	45310.0	0.734	171.6	8.4	6.70	1.146	53.6	0.594	0.698	129.7	450.5	0.284	1.112	6.12	1.724	120.8	214.0	8.6	1.056
12.62	29.13		+/+	8.9	0.0	11.8	0.0	1.109	1.396	268.4	14.3	23.620	0.110	12.920	162.7	15.6	11.2	103.0	1.311
44870.0	45121.0	0.521	331.6	-1.4	6.44	0.894	60.1	0.526	0.838	138.8	468.6	0.397	1.279	6.58	1.247	120.9	188.7	10.6	0.663
45121.0	45310.0	0.664	179.2	8.6	5.95	1.143	57.3	0.543	0.694	127.1	441.7	0.318	1.071	5.10	1.722	116.5	218.8	8.3	0.950
11.23	25.99		+/+	9.6	0.0	18.0	0.0	1.137	1.396	276.0	12.0	21.489	0.135	11.961	164.5	14.1	14.5	101.8	1.475
44880.0	45125.0	0.473	340.1	2.6	6.02	0.892	63.3	0.485	0.831	138.8	465.1	0.428	1.234	5.66	1.243	118.2	196.8	10.3	0.605
45125.0	45310.0	0.605	186.5	8.8	5.39	1.140	60.2	0.499	0.690	125.2	433.4	0.346	1.034	4.26	1.719	112.7	223.3	7.9	0.859
10.09	23.31		+/+	10.3	0.0	24.4	0.0	1.165	1.396	283.0	8.0	19.713	0.162	11.161	167.5	12.7	18.2	101.2	1.644
44890.0	45129.1	0.432	348.2	6.5	5.63	0.890	66.0	0.449	0.824	139.3	462.3	0.454	1.195	4.76	1.239	115.9	204.8	9.6	0.556
45129.1	45310.0	0.556	193.7	9.1	4.98	1.137	62.7	0.461	0.686	123.9	425.6	0.370	1.003	3.54	1.717	109.4	227.6	7.4	0.781
9.14	21.01		+/+	11.0	0.0	30.9	0.0	1.194	1.396	289.7	2.6	18.237	0.191	10.439	170.3	11.3	22.0	101.2	1.807
44900.0	45133.3	0.395	356.1	10.3	5.25	0.887	68.4	0.419	0.818	140.3	460.0	0.475	1.160	3.88	1.236	114.0	212.7	8.5	0.515
45133.3	45310.0	0.515	200.7	9.3	4.68	1.134	64.8	0.429	0.683	123.1	418.2	0.389	0.976	2.91	1.715	106.6	231.9	6.7	0.713
8.33	19.02		+/+	11.8	0.0	37.5	0.0	1.222	1.396	296.1	-3.9	17.017	0.223	9.710	170.2	9.8	25.9	101.4	1.943
44910.0	45137.5	0.363	3.7	13.9	4.88	0.885	70.6	0.394	0.811	141.8	458.3	0.492	1.131	3.01	1.232	112.4	220.4	7.2	0.481
45137.5	45310.0	0.481	207.7	9.7	4.46	1.130	66.6	0.402	0.679	122.7	411.1	0.406	0.952	2.33	1.712	104.0	236.1	5.9	0.654
7.64	17.30		+/+	12.8	0.0	44.3	0.0	1.250	1.396	302.4	-11.2	16.025	0.256	8.954	165.9	8.1	29.8	101.7	2.037
44920.0	45141.8	0.333	11.2	17.2	4.49	0.882	72.5	0.372	0.805	143.6	457.0	0.506	1.104	2.16	1.229	111.1	227.9	5.5	0.452
45141.8	45310.0	0.452	214.5	10.0	4.32	1.127	68.1	0.380	0.675	122.7	404.3	0.419	0.931	1.79	1.710	101.8	240.3	5.0	0.603
7.04	15.80		+/+	14.1	0.0	51.1	0.0	1.278	1.396	308.6	-18.7	15.234	0.290	8.148	159.6	6.3	33.8	101.9	2.071

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44930.0	45146.1	0.306	18.5	20.2	4.10	0.879	74.4	0.353	0.799	145.8	456.0	0.517	1.081	1.34	1.226	110.0	235.3	3.6	0.428
45146.1	45310.0	0.428	221.1	10.5	4.25	1.124	69.4	0.360	0.671	123.0	397.7	0.429	0.912	1.27	1.707	99.7	244.5	3.8	0.559
6.51	14.51		+/+	15.7	0.0	58.0	0.0	1.305	1.396	314.8	-25.9	14.621	0.323	7.327	153.0	4.5	37.8	101.9	2.047
44940.0	45150.4	0.280	25.5	22.7	3.69	0.876	76.1	0.337	0.793	148.5	455.3	0.526	1.060	0.55	1.223	109.1	242.4	1.5	0.408
45150.4	45310.0	0.408	227.5	11.0	4.24	1.121	70.5	0.345	0.667	123.5	391.5	0.437	0.896	0.77	1.704	97.9	248.7	2.5	0.521
6.04	13.39		+/+	17.6	0.0	64.7	0.0	1.331	1.396	320.9	-32.5	14.165	0.356	6.540	146.7	2.8	41.9	101.6	1.974
44950.0	45154.6	0.256	32.0	24.7	3.28	0.872	77.9	0.323	0.787	151.5	454.8	0.533	1.041	-0.19	1.220	108.3	249.2	-0.6	0.391
45154.6	45310.0	0.391	233.6	11.7	4.28	1.118	71.4	0.332	0.663	124.2	385.6	0.443	0.882	0.28	1.702	96.3	252.8	1.0	0.488
5.61	12.44		+/+	19.8	0.0	71.4	0.0	1.356	1.396	327.0	-38.2	13.845	0.388	5.828	141.2	2.2	45.9	101.2	1.872
44960.0	45158.5	0.232	37.7	26.1	2.88	0.869	79.7	0.311	0.782	155.0	454.5	0.539	1.025	-0.87	1.218	107.6	255.6	-2.7	0.377
45158.5	45310.0	0.377	239.3	12.4	4.38	1.115	72.1	0.321	0.659	125.0	380.2	0.447	0.870	-0.21	1.699	94.9	256.7	-0.8	0.460
5.22	11.64		+/+	22.1	0.0	77.7	0.0	1.379	1.396	332.9	-43.0	13.635	0.417	5.212	136.6	3.4	49.9	100.7	1.755
44970.0	45162.3	0.210	42.2	26.9	2.49	0.865	81.5	0.300	0.778	159.1	454.3	0.544	1.011	-1.47	1.215	107.0	261.6	-4.7	0.366
45162.3	45310.0	0.366	244.6	13.3	4.53	1.112	72.8	0.312	0.655	126.0	375.1	0.450	0.860	-0.70	1.696	93.6	260.6	-2.7	0.437
4.89	10.98		+/+	24.6	0.0	83.7	0.0	1.400	1.396	338.6	-46.9	13.526	0.442	4.698	132.8	5.1	53.8	100.3	1.636
44980.0	45165.7	0.191	44.8	27.0	2.14	0.861	83.5	0.292	0.774	163.7	454.3	0.548	1.000	-1.99	1.213	106.6	267.0	-6.5	0.357
45165.7	45310.0	0.357	249.4	14.2	4.73	1.109	73.3	0.306	0.651	126.9	370.6	0.452	0.851	-1.18	1.694	92.5	264.1	-4.8	0.419
4.62	10.45		+/+	27.0	0.0	89.2	0.0	1.419	1.396	343.7	-50.0	13.498	0.464	4.280	129.7	6.9	57.4	99.9	1.523
44990.0	45168.7	0.174	44.8	26.4	1.83	0.857	85.7	0.286	0.771	169.1	454.2	0.550	0.991	-2.42	1.212	106.2	271.6	-8.1	0.351
45168.7	45310.0	0.351	253.5	15.1	4.94	1.106	73.8	0.301	0.648	127.8	366.7	0.453	0.843	-1.64	1.692	91.6	267.3	-6.9	0.405
4.40	10.05		+/+	29.3	0.0	93.9	0.0	1.435	1.396	348.0	-52.4	13.535	0.481	3.950	127.4	8.4	60.7	99.6	1.419
45000.0	45170.9	0.164	41.4	24.8	1.60	0.855	88.2	0.282	0.770	175.5	454.0	0.553	0.986	-2.76	1.212	106.0	275.2	-9.3	0.347
45170.9	45310.0	0.347	256.5	15.9	5.14	1.104	74.1	0.298	0.646	128.5	363.9	0.454	0.838	-2.01	1.690	90.9	269.6	-8.6	0.396
4.27	9.79		+/+	31.3	0.0	97.4	0.0	1.447	1.396	351.3	-54.0	13.620	0.493	3.704	125.8	9.6	63.1	99.4	1.332
45010.0	45171.7	0.164	34.1	22.1	1.51	0.855	91.4	0.280	0.771	183.5	453.3	0.555	0.987A	-3.05	1.213	105.9	276.8	-10.3	0.345
45171.7	45310.0	0.345	257.6	16.3	5.23	1.104	74.2	0.296	0.645	128.8	362.8	0.454	0.836	-2.16	1.690	90.6	270.6	-9.3	0.392
4.27	9.70		+/+	32.7	0.0	98.8	0.0	1.451	1.396	353.1	-54.7	13.737	0.497	3.551	125.1	10.5	64.1	99.0	1.267
45020.0	45169.8	0.185	23.0	18.2	1.72	0.861	95.7	0.283	0.781	194.8	451.3	0.560	1.002A	-3.35	1.219	105.9	274.7	-11.3	0.349
45169.8	45310.0	0.349	255.0	15.5	5.04	1.105	73.9	0.299	0.647	128.2	365.3	0.454	0.841	-1.82	1.691	91.2	268.5	-7.7	0.400
4.53	9.92		+/+	33.2	0.0	95.7	0.0	1.441	1.396	352.0	-54.4	13.930	0.487	3.504	125.5	11.4	61.9	98.0	1.219
45030.0	45160.7	0.257	9.1	15.0	3.00	0.890	102.7	0.304	0.816	213.7	445.7	0.568	1.063A	-4.29	1.240	106.5	262.9	-13.9	0.370
45160.7	45310.0	0.370	242.4	12.9	4.46	1.113	72.5	0.316	0.657	125.6	377.2	0.449	0.864	-0.49	1.698	94.1	259.0	-1.9	0.446
5.64	11.24		+/+	33.6	0.0	81.2	0.0	1.392	1.396	343.3	-53.3	14.853	0.431	3.464	126.7	14.0	52.1	94.7	1.063

ARRIVAL DATE = 2445312.0

44860.0	45118.7	0.623	321.8	-5.5	7.76	0.897	53.6	0.613	0.845	140.9	476.7	0.327	1.364	8.30	1.251	127.1	180.9	10.5	0.791
45118.7	45312.0	0.791	172.7	8.2	7.34	1.145	50.7	0.635	0.696	132.5	456.5	0.254	1.138	6.44	1.739	124.2	216.2	7.9	1.174
13.77	32.62		+/+	8.4	0.0	14.4	0.0	1.121	1.379	269.4	15.3	25.367	0.095	13.596	161.9	17.0	8.6	104.5	1.192
44870.0	45122.6	0.560	331.2	-1.6	7.08	0.894	57.7	0.560	0.838	139.7	472.0	0.369	1.307	7.14	1.247	123.3	189.5	10.5	0.712
45122.6	45312.0	0.712	180.5	8.4	6.42	1.142	54.8	0.578	0.692	129.4	447.3	0.292	1.093	5.25	1.737	119.3	221.0	7.6	1.054
12.18	29.07		+/+	9.1	0.0	20.6	0.0	1.149	1.379	277.2	12.9	22.961	0.117	12.558	163.9	15.2	11.2	103.1	1.351
44880.0	45126.6	0.506	339.9	2.4	6.51	0.892	61.2	0.514	0.831	139.2	468.1	0.404	1.257	6.07	1.243	120.1	197.9	10.1	0.646
45126.6	45312.0	0.646	188.1	8.6	5.76	1.138	58.2	0.530	0.688	127.1	438.6	0.324	1.053	4.30	1.735	115.2	225.4	7.1	0.951
10.87	26.04		+/+	9.8	0.0	27.0	0.0	1.177	1.379	284.4	8.7	20.960	0.142	11.683	167.1	13.6	14.5	102.4	1.517
44890.0	45130.7	0.460	348.3	6.4	6.00	0.889	64.2	0.474	0.824	139.4	464.9	0.433	1.215	5.07	1.239	117.6	206.1	9.4	0.591
45130.7	45312.0	0.591	195.4	8.9	5.26	1.135	61.0	0.488	0.684	125.5	430.6	0.350	1.019	3.51	1.732	111.6	229.6	6.6	0.863
9.79	23.44		+/+	10.5	0.0	33.5	0.0	1.205	1.379	291.3	3.2	19.299	0.170	10.892	170.3	12.0	18.1	102.2	1.678
44900.0	45134.9	0.420	356.4	10.2	5.53	0.887	66.9	0.441	0.817	140.1	462.4	0.457	1.177	4.10	1.236	115.4	214.0	8.4	0.545
45134.9	45312.0	0.545	202.6	9.1	4.90	1.132	63.3	0.453	0.680	124.4	422.9	0.372	0.989	2.82	1.730	108.5	233.7	5.9	0.787
8.88	21.19		+/+	11.4	0.0	40.1	0.0	1.233	1.379	297.8	-3.5	17.928	0.199	10.104	170.5	10.3	21.7	102.3	1.815
44910.0	45139.1	0.384	4.3	13.8	5.08	0.884	69.2	0.413	0.810	141.4	460.4	0.476	1.145	3.16	1.232	113.7	221.8	7.1	0.506
45139.1	45312.0	0.507	209.6	9.4	4.64	1.129	65.3	0.423	0.676	123.9	415.6	0.390	0.963	2.20	1.727	105.7	237.7	5.1	0.721
8.10	19.25		+/+	12.4	0.0	46.8	0.0	1.260	1.379	304.1	-10.9	16.810	0.231	9.276	166.3	8.6	25.4	102.5	1.911
44920.0	45143.4	0.352	12.0	17.1	4.63	0.881	71.3	0.388	0.804	143.0	458.8	0.492	1.116	2.26	1.229	112.2	229.5	5.4	0.474
45143.4	45312.0	0.474	216.4	9.8	4.46	1.126	67.0	0.398	0.672	123.7	408.7	0.405	0.940	1.64	1.725	103.3	241.6	4.1	0.664
7.42	17.56		+/+	13.7	0.0	53.6	0.0	1.288	1.379	310.4	-18.5	15.915	0.263	8.410	-159.9	6.8	29.1	102.5	1.952
44930.0	45147.7	0.322	19.5	20.1	4.18	0.878	73.2	0.367	0.798	145.1	457.7	0.505	1.091	1.39	1.226	111.0	236.9	3.6	0.447
45147.7	45312.0	0.447	223.1	10.2	4.35	1.122	68.4	0.377	0.668	123.8	402.0	0.417	0.920	1.10	1.722	101.1	245.4	3.0	0.613
6.83	16.10		+/+	15.2	0.0	60.4	0.0	1.315	1.379	316.7	-25.7	15.214	0.296	7.539	153.2	5.0	32.8	102.4	1.938
44940.0	45151.9	0.294	26.7	22.5	3.72	0.875	75.1	0.349	0.792	147.6	456.8	0.515	1.069	0.56	1.223	109.9	244.0	1.5	0.424
45151.9	45312.0	0.424	229.4	10.7	4.31	1.119	69.6	0.359	0.664	124.2	395.7	0.426	0.903	0.59	1.719	99.2	249.2	1.8	0.570
6.29	14.83		+/+	17.1	0.0	67.1	0.0	1.340	1.379	322.9	-32.2	14.679	0.329	6.712	147.0	3.5	36.5	102.0	1.880
44950.0	45156.1	0.268	33.5	24.5	3.27	0.872	76.9	0.334	0.786	150.5	456.2	0.524	1.049	-0.20	1.220	109.0	250.9	-0.6	0.405
45156.1	45312.0	0.405	235.6	11.3	4.32	1.116	70.6	0.344	0.660	124.9	389.8	0.433	0.888	0.09	1.717	97.5	253.0	0.3	0.532
5.82	13.73		+/+	19.3	0.0	73.8	0.0	1.365	1.379	329.1	-37.9	14.291	0.361	5.973	141.6	2.9	40.2	101.5	1.794
44960.0	45160.1	0.243	39.6	25.9	2.84	0.868	78.8	0.320	0.781	153.8	455.8	0.531	1.031	-0.89	1.217	108.2	257.4	-2.7	0.389
45160.1	45312.0	0.390	241.4	12.0	4.39	1.113	71.5	0.332	0.656	125.6	384.2	0.438	0.874	-0.39	1.714	96.0	256.6	-1.3	0.500
5.41	12.80		+/+	21.6	0.0	80.1	0.0	1.388	1.379	335.2	-42.6	14.023	0.390	5.338	137.0	3.8	43.9	101.0	1.693
44970.0	45163.8	0.220	44.5	26.7	2.42	0.864	80.7	0.309	0.776	157.7	455.5	0.536	1.016	-1.51	1.215	107.6	263.5	-4.6	0.377
45163.8	45312.0	0.377	246.8	12.8	4.51	1.110	72.2	0.322	0.653	126.5	379.0	0.442	0.863	-0.88	1.712	94.6	260.1	-3.2	0.473
5.04	12.02		+/+	24.0	0.0	86.2	0.0	1.409	1.379	340.9	-46.5	13.854	0.417	4.810	133.2	5.4	47.4	100.4	1.590
44980.0	45167.3	0.199	47.7	26.9	2.04	0.860	82.7	0.300	0.772	162.2	455.4	0.541	1.003	-2.03	1.213	107.1	269.0	-6.4	0.366
45167.3	45312.0	0.367	251.7	13.6	4.68	1.107	72.8	0.315	0.649	127.4	374.4	0.445	0.853	-1.35	1.709	93.4	263.4	-5.1	0.451
4.73	11.38		+/+	26.4	0.0	91.7	0.0	1.428	1.379	346.2	-49.5	13.769	0.441	4.381	130.3	7.0	50.8	100.0	1.491

DEPART	PASS	SPEED	R A	DECL	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
PASS	ARRIVE	SPEED	R A	DECL	I 1	V 1	PSI 1	ECCEN	SMA	THET1	THET2	PERIH	APHEL	I 2	V 2	PSI 2	R A	DECL	SPEED
DV1	DV2	DELVC	LEG	KAPPA	DELK	RAS	DECLS	COIST1	COIST2	RAP	DECLP	VP	-A	E	INCL	LAM1	LAM2	ETA	PERIC
44990.0	45170.3	0.180	48.4	26.4	1.71	0.856	84.9	0.292	0.769	167.5	455.2	0.544	0.994	-2.45	1.211	106.6	273.7	-8.0	0.359
45170.3	45312.0	0.359	255.8	14.5	4.87	1.104	73.3	0.309	0.646	128.3	370.5	0.446	0.845	-1.80	1.707	92.5	266.2	-7.1	0.434
4.48	10.89		+/+	28.6	0.0	96.5	0.0	1.444	1.379	350.7	-51.8	13.752	0.460	4.044	128.0	8.4	53.8	99.7	1.401
45000.0	45172.7	0.168	45.8	25.0	1.46	0.853	87.4	0.287	0.767	173.6	455.0	0.547	0.988	-2.79	1.211	106.3	277.5	-9.2	0.353
45172.7	45312.0	0.353	259.0	15.3	5.06	1.102	73.7	0.305	0.644	129.0	367.5	0.447	0.840	-2.17	1.705	91.7	268.5	-8.8	0.422
4.32	10.54		+/+	30.6	0.0	100.3	0.0	1.456	1.379	354.2	-53.4	13.791	0.474	3.790	126.4	9.6	56.3	99.5	1.323
45010.0	45173.9	0.164	39.4	22.6	1.33	0.852	90.5	0.284	0.768	181.2	454.5	0.550	0.987A	-3.05	1.211	106.2	279.8	-10.2	0.351
45173.9	45312.0	0.351	260.7	15.8	5.17	1.101	73.9	0.303	0.642	129.4	365.9	0.448	0.837	-2.39	1.704	91.4	269.8	-9.8	0.416
4.27	10.38		+/+	32.0	0.0	102.3	0.0	1.462	1.379	356.4	-54.2	13.874	0.481	3.623	125.6	10.5	57.6	99.2	1.262
45020.0	45173.0	0.178	29.3	19.2	1.41	0.856	94.4	0.286	0.775	191.2	453.0	0.554	0.996A	-3.29	1.216	106.1	279.0	-11.0	0.353
45173.0	45312.0	0.353	259.6	15.4	5.09	1.102	73.7	0.304	0.643	129.2	367.0	0.447	0.839	-2.24	1.705	91.6	268.9	-9.1	0.420
4.45	10.49		+/+	32.7	0.0	100.9	0.0	1.458	1.379	356.3	-54.2	14.028	0.476	3.552	125.8	11.1	56.7	98.5	1.215
45030.0	45167.4	0.229	16.9	15.8	2.10	0.874	100.3	0.298	0.797	206.5	449.1	0.560	1.035A	-3.80	1.229	106.5	271.9	-12.3	0.366
45167.4	45312.0	0.366	251.8	13.6	4.68	1.107	72.8	0.314	0.649	127.5	374.3	0.445	0.853	-1.37	1.709	93.4	263.4	-5.2	0.451
5.17	11.37		+/+	32.7	0.0	91.9	0.0	1.428	1.379	351.0	-52.9	14.567	0.441	3.554	127.1	12.3	50.9	96.5	1.128
									ARRIVAL DATE = 2445314.0										
44870.0	45124.3	0.605	330.6	-1.9	7.86	0.894	54.9	0.598	0.838	140.8	475.8	0.337	1.338	7.84	1.247	126.0	190.3	10.3	0.768
45124.3	45314.0	0.768	181.8	8.1	6.93	1.140	51.8	0.619	0.691	132.1	453.3	0.263	1.118	5.44	1.756	122.7	223.3	6.9	1.172
13.31	32.56		+/+	8.7	0.0	23.3	0.0	1.160	1.360	278.5	14.6	24.687	0.100	13.178	162.6	16.5	8.2	104.3	1.222
44880.0	45128.3	0.545	339.6	2.2	7.10	0.891	58.8	0.547	0.830	139.9	471.5	0.376	1.285	6.59	1.243	122.5	198.9	10.0	0.694
45128.3	45314.0	0.694	189.6	8.3	6.12	1.137	55.7	0.566	0.686	129.4	444.3	0.298	1.075	4.35	1.753	118.1	227.8	6.4	1.056
11.81	29.12		+/+	9.4	0.0	29.6	0.0	1.188	1.360	285.9	10.3	22.422	0.123	12.248	166.2	14.6	11.0	103.5	1.384
44890.0	45132.4	0.493	348.3	6.2	6.45	0.889	62.1	0.503	0.823	139.7	467.9	0.409	1.238	5.44	1.239	119.5	207.3	9.3	0.632
45132.4	45314.0	0.632	197.1	8.5	5.53	1.133	58.9	0.520	0.682	127.4	435.8	0.327	1.037	3.47	1.751	114.1	231.9	5.8	0.956
10.57	26.18		+/+	10.1	0.0	36.1	0.0	1.216	1.360	292.9	4.5	20.543	0.148	11.398	170.0	12.8	14.3	103.2	1.544
44900.0	45136.6	0.449	356.6	10.0	5.87	0.886	65.0	0.466	0.816	140.1	465.1	0.436	1.197	4.37	1.236	117.1	215.4	8.3	0.580
45136.6	45314.0	0.580	204.4	8.8	5.10	1.130	61.5	0.481	0.678	126.0	427.9	0.352	1.004	2.72	1.748	110.7	235.9	5.1	0.870
9.53	23.64		+/+	10.9	0.0	42.8	0.0	1.244	1.360	299.5	-2.4	18.993	0.176	10.553	171.1	11.1	17.8	103.2	1.683
44910.0	45140.8	0.409	4.7	13.7	5.32	0.883	67.6	0.435	0.810	141.1	462.8	0.458	1.162	3.34	1.232	115.1	223.3	7.0	0.536
45140.8	45314.0	0.536	211.5	9.0	4.79	1.127	63.8	0.447	0.674	125.2	420.4	0.372	0.976	2.06	1.745	107.7	239.7	4.3	0.796
8.64	21.45		+/+	11.9	0.0	49.5	0.0	1.271	1.360	306.0	-10.0	17.727	0.206	9.664	167.1	9.3	21.3	103.3	1.783
44920.0	45145.1	0.374	12.7	17.0	4.78	0.881	69.8	0.408	0.803	142.5	461.0	0.476	1.131	2.37	1.229	113.5	231.0	5.4	0.500
45145.1	45314.0	0.500	218.4	9.4	4.57	1.123	65.7	0.419	0.670	124.8	413.2	0.389	0.951	1.47	1.743	105.0	243.4	3.4	0.731
7.87	19.54		+/+	13.1	0.0	56.2	0.0	1.298	1.360	312.4	-17.7	16.709	0.237	8.734	160.7	7.5	24.8	103.2	1.832
44930.0	45149.3	0.342	20.4	19.9	4.27	0.878	71.9	0.384	0.797	144.3	459.6	0.491	1.103	1.45	1.226	112.0	238.6	3.5	0.469
45149.3	45314.0	0.470	225.1	9.8	4.42	1.120	67.3	0.395	0.666	124.8	406.4	0.403	0.929	0.92	1.740	102.7	247.0	2.3	0.674
7.21	17.88		+/+	14.7	0.0	63.0	0.0	1.325	1.360	318.8	-25.1	15.905	0.269	7.809	154.0	5.7	28.3	102.9	1.830
44940.0	45153.6	0.312	28.0	22.4	3.76	0.874	73.9	0.364	0.791	146.6	458.5	0.503	1.079	0.59	1.222	110.8	245.8	1.5	0.444
45153.6	45314.0	0.444	231.6	10.2	4.35	1.117	68.6	0.376	0.662	125.1	400.0	0.413	0.910	0.39	1.738	100.6	250.5	1.1	0.625
6.62	16.44		+/+	16.6	0.0	69.8	0.0	1.350	1.360	325.1	-31.6	15.283	0.301	6.938	147.7	4.2	31.7	102.5	1.786
44950.0	45157.7	0.283	35.1	24.3	3.26	0.871	75.9	0.347	0.785	149.4	457.7	0.513	1.058	-0.21	1.220	109.8	252.8	-0.6	0.422
45157.7	45314.0	0.422	237.9	10.8	4.33	1.114	69.7	0.359	0.658	125.6	393.9	0.422	0.894	-0.10	1.735	98.8	254.0	-0.3	0.583
6.09	15.20		+/+	18.7	0.0	76.4	0.0	1.375	1.360	331.4	-37.3	14.816	0.332	6.161	142.2	3.7	35.2	101.9	1.714
44960.0	45161.7	0.257	41.6	25.7	2.78	0.867	77.8	0.332	0.780	152.6	457.2	0.521	1.039	-0.92	1.217	109.0	259.4	-2.6	0.404
45161.7	45314.0	0.404	243.7	11.4	4.38	1.111	70.7	0.345	0.654	126.3	388.2	0.428	0.880	-0.59	1.732	97.1	257.3	-1.9	0.546
5.63	14.13		+/+	21.0	0.0	82.8	0.0	1.397	1.360	337.6	-42.0	14.476	0.362	5.499	137.6	4.3	38.5	101.2	1.629
44970.0	45165.5	0.232	47.0	26.5	2.34	0.862	79.7	0.319	0.775	156.3	456.8	0.528	1.022	-1.55	1.214	108.2	265.6	-4.6	0.390
45165.5	45314.0	0.390	249.2	12.1	4.47	1.107	71.5	0.334	0.650	127.2	383.0	0.433	0.867	-1.07	1.730	95.7	260.5	-3.6	0.515
5.22	13.22		+/+	23.3	0.0	88.9	0.0	1.418	1.360	343.5	-45.8	14.243	0.390	4.951	133.9	5.7	41.8	100.7	1.541
44980.0	45169.0	0.208	50.8	26.7	1.93	0.858	81.8	0.308	0.771	160.6	456.5	0.533	1.008	-2.07	1.212	107.6	271.1	-6.4	0.377
45169.0	45314.0	0.378	254.1	12.9	4.60	1.104	72.2	0.326	0.646	128.0	378.3	0.436	0.857	-1.53	1.727	94.5	263.5	-5.4	0.489
4.87	12.48		+/+	25.6	0.0	94.5	0.0	1.437	1.360	348.9	-48.8	14.094	0.415	4.508	131.0	7.2	44.9	100.2	1.457
44990.0	45172.1	0.188	52.3	26.3	1.58	0.854	84.0	0.300	0.767	165.6	456.4	0.537	0.997	-2.50	1.210	107.1	276.1	-7.9	0.368
45172.1	45314.0	0.368	258.5	13.7	4.77	1.102	72.8	0.319	0.643	128.9	374.2	0.438	0.848	-1.98	1.725	93.4	266.2	-7.3	0.468
4.59	11.87		+/+	27.8	0.0	99.5	0.0	1.453	1.360	353.7	-51.1	14.022	0.436	4.158	128.7	8.6	47.8	99.9	1.378
45000.0	45174.7	0.173	50.7	25.1	1.30	0.850	86.5	0.293	0.765	171.5	456.2	0.541	0.990	-2.83	1.209	106.8	280.2	-9.1	0.362
45174.7	45314.0	0.362	261.9	14.5	4.94	1.099	73.2	0.314	0.640	129.7	370.9	0.440	0.841	-2.36	1.723	92.6	268.4	-9.0	0.453
4.38	11.43		+/+	29.8	0.0	103.6	0.0	1.466	1.360	357.5	-52.7	14.008	0.453	3.894	127.2	9.7	50.2	99.6	1.310
45010.0	45176.3	0.166	45.3	23.1	1.12	0.849	89.4	0.290	0.765	178.6	455.7	0.544	0.987	-3.07	1.210	106.5	282.9	-10.0	0.358
45176.3	45314.0	0.358	264.1	15.1	5.07	1.098	73.5	0.311	0.639	130.2	368.9	0.440	0.837	-2.62	1.722	92.1	269.8	-10.2	0.444
4.29	11.17		+/+	31.3	0.0	106.2	0.0	1.474	1.360	0.1	-53.6	14.047	0.463	3.711	126.3	10.5	51.8	99.5	1.254
45020.0	45176.3	0.173	36.2	20.1	1.12	0.851	93.1	0.289	0.770	187.7	454.6	0.547	0.992A	-3.27	1.213	106.5	283.4	-10.7	0.358
45176.3	45314.0	0.358	264.1	15.1	5.07	1.098	73.5	0.311	0.639	130.2	368.9	0.440	0.837	-2.62	1.722	92.1	269.8	-10.2	0.444
4.39	11.18		+/+	32.1	0.0	106.1	0.0	1.474	1.360	0.8	-53.6	14.155	0.462	3.619	126.3	11.0	51.8	99.0	1.211
45030.0	45172.9	0.209	24.7	16.8	1.49	0.862	98.2	0.297	0.784	200.4	451.9	0.551	1.017A	-3.56	1.222	106.7	279.3	-11.4	0.366
45172.9	45314.0	0.366	259.5	14.0	4.82	1.101	72.9	0.317	0.642	129.1	373.2	0.439	0.846	-2.09	1.724	93.2	266.8	-7.8	0.463
4.87	11.74		+/+	32.1	0.0	100.7	0.0	1.457	1.360	357.8	-52.6	14.455	0.441	3.616	127.3	11.5	48.5	97.8	1.154
45040.0	45161.0	0.313	11.7	15.6	3.48	0.908	106.7	0.335	0.841	222.2	444.6	0.559	1.123A	-5.02	1.254	107.9	263.7	-14.9	0.408
45161.0	45314.0	0.408	242.6	11.3	4.36	1.111	70.5	0.348	0.655	126.2	389.3	0.427	0.882	-0.50	1.733	97.4	256.6	-1.6	0.553
6.64	14.32	867.3	+/+	33.5	4.1	81.6	0.0	1.393	1.360	348.7	-51.6	15.732	0.356	3.946	128.2	15.0	37.9	91.8	0.882

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
ARRIVAL DATE = 2445316.0																			
44880.0	45130.0	0.590	339.2	1.8	7.83	0.891	56.0	0.585	0.830	141.0	475.3	0.344	1.316	7.24	1.243	125.2	199.8	9.8	0.749
45130.0	45316.0	0.750	191.0	7.8	6.50	1.135	52.7	0.507	0.684	132.0	450.4	0.269	1.100	4.42	1.775	121.4	230.3	5.7	1.174
12.93	32.63		+/+	8.9	0.0	32.4	0.0	1.200	1.337	287.4	12.7	24.138	0.105	12.840	164.4	16.0	7.7	104.7	1.248
44890.0	45134.1	0.532	348.1	5.9	6.99	0.888	59.7	0.537	0.823	140.3	471.3	0.381	1.265	5.91	1.239	121.9	208.3	9.2	0.679
45134.1	45316.0	0.679	198.7	8.1	5.80	1.131	56.4	0.557	0.680	129.6	441.5	0.302	1.058	3.43	1.772	117.0	234.5	5.1	1.061
11.50	29.29		+/+	9.6	0.0	38.9	0.0	1.228	1.337	294.5	6.7	22.001	0.128	11.951	169.1	14.0	10.7	104.3	1.406
44900.0	45138.3	0.482	356.7	9.8	6.26	0.886	62.9	0.496	0.816	140.3	468.0	0.411	1.220	4.69	1.235	119.1	216.7	8.2	0.621
45138.3	45316.0	0.621	206.2	8.3	5.28	1.128	59.4	0.513	0.676	127.9	433.2	0.329	1.022	2.61	1.770	113.2	238.4	4.4	0.964
10.30	26.41		+/+	10.4	0.0	45.5	0.0	1.255	1.337	301.4	-0.6	20.238	0.154	11.061	171.7	12.0	14.0	104.2	1.547
44910.0	45142.6	0.438	5.1	13.4	5.59	0.883	65.7	0.461	0.809	140.9	465.4	0.436	1.182	3.57	1.232	116.8	224.8	6.9	0.571
45142.6	45316.0	0.572	213.4	8.5	4.91	1.124	62.0	0.476	0.672	126.8	425.4	0.352	0.991	1.91	1.767	109.9	242.1	3.6	0.880
9.29	23.92		+/+	11.3	0.0	52.2	0.0	1.282	1.337	308.0	-8.4	18.797	0.181	10.118	168.5	10.1	17.4	104.1	1.653
44920.0	45146.8	0.399	13.3	16.8	4.97	0.880	68.2	0.430	0.802	142.1	463.3	0.457	1.148	2.51	1.229	114.9	232.6	5.3	0.530
45146.8	45316.0	0.530	220.5	8.9	4.64	1.121	64.1	0.444	0.667	126.1	418.1	0.371	0.964	1.28	1.764	107.0	245.6	2.7	0.806
8.42	21.76		+/+	12.6	0.0	59.0	0.0	1.309	1.337	314.5	-16.4	17.634	0.211	9.129	162.0	8.3	20.8	103.9	1.712
44930.0	45151.1	0.364	21.4	19.7	4.37	0.877	70.4	0.404	0.796	143.7	461.7	0.474	1.118	1.53	1.225	113.3	240.3	3.5	0.496
45151.1	45316.0	0.496	227.3	9.2	4.46	1.118	65.9	0.418	0.663	126.0	411.1	0.386	0.940	0.71	1.762	104.4	249.1	1.6	0.743
7.67	19.89		+/+	14.1	0.0	65.8	0.0	1.335	1.337	321.0	-23.9	16.708	0.241	8.143	155.1	6.5	24.1	103.5	1.721
44940.0	45155.3	0.331	29.2	22.2	3.80	0.873	72.6	0.382	0.790	145.7	460.4	0.488	1.092	0.61	1.222	112.0	247.7	1.5	0.467
45155.3	45316.0	0.467	233.9	9.6	4.35	1.114	67.4	0.395	0.659	126.1	404.5	0.399	0.919	0.18	1.759	102.2	252.4	0.5	0.687
7.01	18.25		+/+	15.9	0.0	72.6	0.0	1.361	1.337	327.5	-30.7	15.983	0.272	7.217	148.7	5.2	27.3	103.0	1.690
44950.0	45159.5	0.301	36.7	24.1	3.25	0.869	74.6	0.362	0.784	148.3	459.4	0.500	1.068	-0.22	1.219	110.8	254.7	-0.6	0.442
45159.5	45316.0	0.442	240.2	10.1	4.31	1.111	68.7	0.377	0.655	126.5	398.3	0.408	0.901	-0.32	1.756	100.2	255.6	-0.9	0.639
6.42	16.84		+/+	18.0	0.0	79.2	0.0	1.385	1.337	333.9	-36.4	15.426	0.303	6.396	143.2	4.5	30.5	102.3	1.633
44960.0	45163.5	0.272	43.5	25.5	2.73	0.865	76.6	0.345	0.779	151.3	458.7	0.510	1.048	-0.96	1.216	109.8	261.4	-2.6	0.422
45163.5	45316.0	0.422	246.1	10.7	4.32	1.108	69.8	0.361	0.651	127.1	392.5	0.416	0.886	-0.80	1.753	98.5	258.7	-2.3	0.597
5.89	15.62		+/+	20.2	0.0	85.7	0.0	1.407	1.337	340.3	-41.1	15.005	0.333	5.698	138.6	5.0	33.7	101.5	1.563
44970.0	45167.4	0.245	49.5	26.3	2.24	0.861	78.6	0.331	0.774	154.8	458.2	0.518	1.030	-1.60	1.214	109.0	267.7	-4.5	0.405
45167.4	45316.0	0.405	251.7	11.4	4.39	1.105	70.7	0.349	0.647	127.9	387.1	0.421	0.872	-1.27	1.751	96.9	261.7	-3.9	0.561
5.44	14.58		+/+	22.5	0.0	91.8	0.0	1.428	1.337	346.3	-44.9	14.698	0.361	5.124	134.8	6.1	36.8	100.9	1.489
44980.0	45170.9	0.221	53.9	26.5	1.81	0.856	80.7	0.319	0.769	158.9	457.9	0.524	1.014	-2.13	1.211	108.3	273.5	-6.3	0.391
45170.9	45316.0	0.391	256.8	12.1	4.49	1.101	71.5	0.338	0.643	128.7	382.2	0.426	0.861	-1.73	1.748	95.6	264.4	-5.7	0.531
5.05	13.71		+/+	24.8	0.0	97.6	0.0	1.447	1.337	352.0	-47.9	14.483	0.387	4.661	131.9	7.5	39.7	100.4	1.418
44990.0	45174.1	0.198	56.3	26.1	1.43	0.852	83.0	0.309	0.765	163.7	457.7	0.529	1.002	-2.56	1.209	107.7	278.7	-7.8	0.380
45174.1	45316.0	0.380	261.2	12.8	4.64	1.098	72.1	0.330	0.640	129.6	378.0	0.428	0.851	-2.16	1.746	94.4	267.0	-7.5	0.507
4.72	13.00		+/+	26.9	0.0	102.7	0.0	1.463	1.337	357.0	-50.2	14.345	0.410	4.296	129.7	8.8	42.4	100.0	1.352
45000.0	45176.8	0.180	55.8	25.1	1.12	0.848	85.5	0.301	0.763	169.3	457.4	0.533	0.992	-2.88	1.208	107.3	283.0	-9.0	0.371
45176.8	45316.0	0.372	265.0	13.6	4.79	1.096	72.6	0.324	0.637	130.4	374.4	0.430	0.844	-2.56	1.744	93.5	269.1	-9.2	0.488
4.48	12.45		+/+	28.8	0.0	107.1	0.0	1.477	1.337	1.1	-51.8	14.272	0.429	4.018	128.1	9.8	44.8	99.8	1.294
45010.0	45178.8	0.170	51.6	23.4	0.90	0.845	88.3	0.296	0.762	175.9	457.1	0.536	0.988	-3.10	1.208	107.0	286.3	-9.8	0.366
45178.8	45316.0	0.366	267.6	14.2	4.93	1.094	73.0	0.320	0.635	131.0	371.9	0.431	0.838	-2.86	1.742	92.9	270.7	-10.5	0.475
4.34	12.08		+/+	30.4	0.0	110.2	0.0	1.486	1.337	4.1	-52.7	14.260	0.442	3.820	127.2	10.6	46.6	99.7	1.245
45020.0	45179.5	0.171	43.6	20.9	0.82	0.846	91.7	0.294	0.765	184.2	456.3	0.539	0.990A	-3.26	1.210	106.8	287.7	-10.4	0.364
45179.5	45316.0	0.364	268.5	14.4	4.99	1.093	73.1	0.319	0.634	131.3	371.1	0.432	0.837	-2.96	1.742	92.7	271.3	-11.0	0.471
4.36	11.97		+/+	31.3	0.0	111.3	0.0	1.490	1.337	5.5	-52.9	14.315	0.446	3.706	127.0	11.0	47.2	99.5	1.207
45030.0	45177.7	0.195	32.9	17.9	1.00	0.853	96.3	0.299	0.774	195.2	454.4	0.543	1.006A	-3.44	1.216	106.9	285.8	-10.9	0.369
45177.7	45316.0	0.369	266.1	13.9	4.85	1.095	72.8	0.323	0.636	130.7	373.3	0.431	0.841	-2.69	1.743	93.2	269.8	-9.7	0.482
4.67	12.28		+/+	31.5	0.0	108.5	0.0	1.481	1.337	4.1	-52.1	14.529	0.434	3.683	127.8	11.2	45.6	98.8	1.166
45040.0	45170.7	0.263	21.3	15.6	1.89	0.879	103.0	0.319	0.806	211.8	449.7	0.549	1.063A	-4.00	1.236	107.7	276.8	-12.1	0.392
45170.7	45316.0	0.392	256.4	12.0	4.49	1.102	71.4	0.339	0.644	128.7	382.6	0.425	0.862	-1.70	1.748	95.7	264.2	-5.6	0.533
5.73	13.76	62.6	+/+	31.5	0.3	97.2	0.0	1.446	1.337	356.9	-50.4	15.376	0.385	3.725	129.6	12.1	39.5	96.5	1.036
ARRIVAL DATE = 2445318.0																			
44880.0	45131.8	0.642	338.5	1.4	8.75	0.891	52.6	0.629	0.830	142.5	479.5	0.308	1.352	8.07	1.243	128.4	200.4	9.7	0.815
45131.8	45318.0	0.815	192.2	7.3	6.90	1.133	49.3	0.654	0.682	135.1	457.2	0.236	1.129	4.51	1.800	125.3	233.0	5.1	1.309
14.26	36.65		+/+	8.5	0.0	35.2	0.0	1.212	1.312	288.8	16.1	26.153	0.089	13.427	161.7	17.6	5.3	105.8	1.108
44890.0	45135.9	0.577	347.8	5.5	7.66	0.888	56.8	0.576	0.822	141.2	475.0	0.349	1.296	6.50	1.239	124.6	209.3	9.0	0.735
45135.9	45318.0	0.735	200.2	7.5	6.05	1.129	53.4	0.598	0.678	132.2	447.8	0.272	1.083	3.39	1.797	120.3	237.2	4.5	1.181
12.62	32.83		+/+	9.1	0.0	41.8	0.0	1.240	1.312	296.2	9.7	23.715	0.110	12.540	167.2	15.3	7.2	105.4	1.265
44900.0	45140.1	0.521	356.7	9.4	6.74	0.885	60.4	0.530	0.815	140.8	471.4	0.383	1.247	5.10	1.235	121.5	217.9	8.1	0.668
45140.1	45318.0	0.668	207.9	7.7	5.45	1.126	56.9	0.550	0.673	130.0	439.0	0.303	1.043	2.50	1.794	116.1	241.2	3.8	1.070
11.24	29.55		+/+	9.9	0.0	48.4	0.0	1.267	1.312	303.2	2.1	21.700	0.133	11.628	171.8	13.2	10.3	105.2	1.409
44910.0	45144.4	0.472	5.4	13.1	5.93	0.882	63.5	0.491	0.808	141.0	468.4	0.412	1.205	3.84	1.232	118.8	226.2	6.8	0.613
45144.4	45318.0	0.613	215.4	7.9	5.01	1.122	59.8	0.509	0.669	128.6	430.9	0.329	1.009	1.74	1.792	112.4	244.8	3.0	0.974
10.08	26.72		+/+	10.8	0.0	55.1	0.0	1.294	1.312	310.0	-6.1	20.049	0.158	10.646	170.4	11.2	13.6	105.1	1.522
44920.0	45148.6	0.429	13.8	16.5	5.18	0.879	66.2	0.457	0.802	141.8	466.0	0.436	1.168	2.68	1.228	116.7	234.2	5.2	0.566
45148.6	45318.0	0.566	222.5	8.2	4.69	1.119	62.2	0.473	0.664	127.7	423.2	0.350	0.979	1.09	1.789	109.2	248.3	2.1	0.891
9.08	24.27		+/+	12.0	0.0	61.9	0.0	1.320	1.312	316.6	-14.5	18.712	0.185	9.596	164.0	9.3	16.9	104.8	1.590
44930.0	45152.9	0.390	22.2	19.5	4.49	0.876	68.7	0.428	0.795	143.1	464.1	0.455	1.135	1.62	1.225	114.8	242.0	3.4	0.527
45152.9	45318.0	0.527	229.5	8.5	4.47	1.115	64.3	0.443	0.660	127.3	416.0	0.367	0.953	0.50	1.786	106.4	251.6	1.0	0.819
8.22	22.14		+/+	13.4	0.0	68.7	0.0	1.346	1.312	323.3	-22.3	17.643	0.214	8.547	156.8	7.6	20.1	104.3	1.611

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44940.0	45157.2	0.355	30.3	21.9	3.84	0.872	71.0	0.402	0.789	144.9	462.5	0.472	1.106	0.65	1.222	113.3	249.5	1.5	0.494
45157.2	45318.0	0.494	236.2	8.9	4.32	1.112	66.0	0.418	0.656	127.2	409.2	0.382	0.930	-0.03	1.783	104.0	254.8	-0.1	0.756
7.47	20.29		+/+	15.2	0.0	75.5	0.0	1.371	1.312	330.0	-29.3	16.796	0.243	7.558	150.2	6.2	23.2	103.5	1.594
44950.0	45161.4	0.322	38.2	23.8	3.23	0.868	73.2	0.380	0.783	147.2	461.4	0.485	1.081	-0.23	1.219	112.0	256.7	-0.6	0.466
45161.4	45318.0	0.466	242.6	9.4	4.25	1.108	67.4	0.397	0.652	127.5	402.8	0.393	0.910	-0.54	1.781	101.8	257.8	-1.4	0.702
6.81	18.68		+/+	17.2	0.0	82.2	0.0	1.395	1.312	336.6	-35.1	16.134	0.273	6.683	144.5	5.5	26.3	102.7	1.551
44960.0	45165.4	0.291	45.5	25.2	2.66	0.864	75.3	0.361	0.777	150.0	460.5	0.496	1.058	-1.00	1.216	110.8	263.6	-2.6	0.443
45165.4	45318.0	0.443	248.7	9.9	4.23	1.105	68.7	0.380	0.648	128.0	396.9	0.402	0.893	-1.03	1.778	99.9	260.8	-2.7	0.654
6.23	17.29		+/+	19.4	0.0	88.7	0.0	1.418	1.312	343.1	-40.0	15.622	0.302	5.942	139.8	5.7	29.3	101.9	1.495
44970.0	45169.3	0.262	51.9	25.9	2.13	0.860	77.4	0.345	0.772	153.3	459.9	0.506	1.039	-1.66	1.213	109.9	270.1	-4.5	0.423
45169.3	45318.0	0.423	254.4	10.5	4.26	1.101	69.7	0.365	0.644	128.7	391.3	0.408	0.879	-1.49	1.775	98.2	263.5	-4.3	0.613
5.71	16.09		+/+	21.6	0.0	95.0	0.0	1.439	1.312	349.4	-43.8	15.233	0.331	5.334	136.0	6.6	32.2	101.2	1.434
44980.0	45173.0	0.235	57.1	26.1	1.66	0.855	79.5	0.331	0.767	157.2	459.4	0.513	1.022	-2.20	1.211	109.1	276.0	-6.2	0.407
45173.0	45318.0	0.407	259.6	11.1	4.35	1.098	70.6	0.354	0.640	129.5	386.3	0.414	0.866	-1.94	1.773	96.8	266.2	-5.9	0.579
5.27	15.08		+/+	23.8	0.0	100.8	0.0	1.457	1.312	355.2	-46.8	14.941	0.358	4.846	133.1	7.8	35.0	100.6	1.376
44990.0	45176.3	0.211	60.3	25.8	1.26	0.850	81.8	0.319	0.763	161.7	459.1	0.520	1.007	-2.63	1.208	108.4	281.4	-7.7	0.394
45176.3	45318.0	0.394	264.2	11.8	4.46	1.095	71.4	0.344	0.636	130.4	381.9	0.417	0.855	-2.36	1.770	95.5	268.5	-7.6	0.550
4.90	14.25		+/+	25.9	0.0	106.1	0.0	1.474	1.312	0.4	-49.0	14.730	0.382	4.461	130.9	9.0	37.6	100.2	1.322
45000.0	45179.2	0.190	61.0	24.9	0.91	0.846	84.3	0.311	0.760	167.0	458.8	0.524	0.997	-2.95	1.207	107.9	286.1	-8.9	0.384
45179.2	45318.0	0.384	268.2	12.5	4.60	1.092	72.0	0.337	0.633	131.2	378.0	0.420	0.847	-2.76	1.768	94.5	270.7	-9.3	0.527
4.61	13.58		+/+	27.8	0.0	110.8	0.0	1.488	1.312	4.9	-50.6	14.592	0.403	4.166	129.3	10.0	40.0	100.0	1.275
45010.0	45181.4	0.176	58.1	23.5	0.67	0.842	87.1	0.304	0.759	173.2	458.5	0.528	0.990	-3.16	1.206	107.5	289.7	-9.7	0.376
45181.4	45318.0	0.376	271.2	13.2	4.74	1.090	72.4	0.332	0.631	131.9	375.2	0.421	0.840	-3.07	1.766	93.8	272.3	-10.7	0.511
4.42	13.11		+/+	29.3	0.0	114.4	0.0	1.499	1.312	8.3	-51.6	14.514	0.418	3.952	128.4	10.8	41.9	99.9	1.235
45020.0	45182.6	0.171	51.4	21.4	0.53	0.841	90.3	0.301	0.760	180.7	457.9	0.531	0.989A	-3.29	1.207	107.3	291.9	-10.2	0.373
45182.6	45318.0	0.373	272.9	13.6	4.82	1.088	72.6	0.329	0.629	132.3	373.6	0.422	0.837	-3.26	1.765	93.4	273.2	-11.5	0.502
4.36	12.86		+/+	30.4	0.0	116.4	0.0	1.504	1.312	10.3	-51.8	14.510	0.427	3.817	128.1	11.1	42.9	99.8	1.202
45030.0	45182.1	0.185	41.6	18.8	0.58	0.845	94.4	0.302	0.766	190.4	456.6	0.535	0.998A	-3.38	1.212	107.3	291.7	-10.5	0.374
45182.1	45318.0	0.374	272.1	13.4	4.78	1.089	72.5	0.331	0.630	132.1	374.3	0.422	0.838	-3.18	1.766	93.5	272.8	-11.1	0.506
4.54	12.97		+/+	30.8	0.0	115.4	0.0	1.502	1.312	10.1	-51.3	14.629	0.423	3.769	128.7	11.2	42.4	99.5	1.171
45040.0	45178.0	0.231	30.5	16.4	1.02	0.860	100.1	0.314	0.786	203.9	453.5	0.539	1.032A	-3.61	1.224	107.7	286.6	-10.9	0.388
45178.0	45318.0	0.388	266.6	12.2	4.54	1.093	71.7	0.340	0.634	130.9	379.6	0.419	0.850	-2.59	1.769	94.9	269.8	-8.5	0.536
5.21	13.85		+/+	30.5	0.0	108.9	0.0	1.482	1.312	5.8	-49.6	15.122	0.394	3.797	130.3	11.1	39.0	98.4	1.102

ARRIVAL DATE = 2445320.0

44890.0	45137.8	0.630	347.3	5.0	8.49	0.888	53.4	0.620	0.822	142.6	479.3	0.313	1.332	7.25	1.239	127.8	210.1	8.9	0.800
45137.8	45320.0	0.801	201.5	6.8	6.30	1.127	49.9	0.646	0.675	135.2	454.7	0.239	1.112	3.37	1.825	124.2	240.2	3.9	1.318
13.95	36.90		+/+	8.7	0.0	44.7	0.0	1.252	1.284	297.7	13.7	25.735	0.092	13.121	164.1	17.0	4.3	106.5	1.120
44900.0	45142.0	0.567	356.5	9.0	7.32	0.885	57.5	0.569	0.815	141.6	475.1	0.351	1.279	5.62	1.235	124.2	218.9	7.9	0.724
45142.0	45320.0	0.725	209.5	7.0	5.58	1.123	53.9	0.593	0.671	132.6	445.5	0.273	1.068	2.37	1.822	119.4	244.2	3.2	1.191
12.36	33.14		+/+	9.4	0.0	51.3	0.0	1.279	1.284	305.0	5.7	23.420	0.113	12.231	170.6	14.7	6.6	106.3	1.267
44910.0	45146.2	0.512	5.5	12.8	6.33	0.882	60.9	0.525	0.808	141.4	471.7	0.383	1.232	4.18	1.232	121.2	227.5	6.7	0.661
45146.2	45320.0	0.661	217.2	7.2	5.07	1.120	57.2	0.546	0.666	130.7	436.9	0.302	1.030	1.56	1.820	115.3	247.9	2.4	1.082
11.02	29.90		+/+	10.2	0.0	58.1	0.0	1.306	1.284	312.0	-3.0	21.520	0.136	11.237	172.4	12.5	9.8	106.1	1.388
44920.0	45150.5	0.464	14.3	16.2	5.44	0.879	64.0	0.487	0.801	141.8	468.9	0.411	1.191	2.90	1.228	118.7	235.7	5.1	0.607
45150.5	45320.0	0.608	224.6	7.5	4.69	1.116	60.0	0.507	0.661	129.5	428.9	0.326	0.997	0.87	1.817	111.8	251.3	1.5	0.987
9.88	27.10		+/+	11.3	0.0	64.9	0.0	1.332	1.284	318.8	-11.9	19.975	0.160	10.147	166.5	10.5	13.1	105.7	1.468
44930.0	45154.8	0.421	22.9	19.1	4.64	0.875	66.7	0.455	0.794	142.8	466.7	0.433	1.156	1.74	1.225	116.6	243.7	3.4	0.563
45154.8	45320.0	0.563	231.7	7.8	4.43	1.112	62.3	0.473	0.657	128.8	421.3	0.346	0.968	0.27	1.814	108.7	254.6	0.5	0.905
8.89	24.68		+/+	12.7	0.0	71.8	0.0	1.358	1.284	325.7	-20.1	18.734	0.187	9.030	159.1	8.7	16.2	105.1	1.502
44940.0	45159.1	0.382	31.4	21.6	3.90	0.871	69.2	0.426	0.788	144.3	464.9	0.452	1.124	0.69	1.222	114.8	251.4	1.5	0.525
45159.1	45320.0	0.525	238.5	8.1	4.25	1.109	64.3	0.445	0.652	128.6	414.3	0.362	0.943	-0.28	1.811	106.0	257.7	-0.6	0.834
8.04	22.57		+/+	14.4	0.0	78.6	0.0	1.382	1.284	332.5	-27.4	17.743	0.215	7.969	152.1	7.3	19.3	104.2	1.497
44950.0	45163.3	0.346	39.6	23.5	3.21	0.867	71.5	0.402	0.782	146.3	463.5	0.468	1.096	-0.24	1.218	113.3	258.8	-0.5	0.493
45163.3	45320.0	0.493	245.1	8.5	4.14	1.105	66.0	0.421	0.648	128.7	407.7	0.375	0.921	-0.78	1.808	103.6	260.6	-1.8	0.772
7.29	20.74		+/+	16.4	0.0	85.3	0.0	1.406	1.284	339.3	-33.5	16.959	0.243	7.030	146.2	6.6	22.3	103.3	1.467
44960.0	45167.4	0.312	47.3	24.8	2.58	0.863	73.7	0.380	0.776	148.8	462.4	0.481	1.071	-1.05	1.215	112.0	265.8	-2.5	0.466
45167.4	45320.0	0.467	251.3	8.9	4.09	1.101	67.4	0.401	0.644	129.1	401.6	0.386	0.902	-1.25	1.806	101.6	263.4	-3.1	0.718
6.62	19.16		+/+	18.5	0.0	91.9	0.0	1.428	1.284	346.0	-38.5	16.339	0.272	6.234	141.3	6.6	25.2	102.4	1.424
44970.0	45171.3	0.281	54.3	25.5	2.01	0.858	75.9	0.361	0.771	151.8	461.6	0.492	1.049	-1.73	1.213	110.9	272.4	-4.4	0.444
45171.3	45320.0	0.444	257.1	9.5	4.10	1.098	68.6	0.385	0.640	129.7	395.8	0.394	0.886	-1.71	1.803	99.7	266.0	-4.5	0.671
6.05	17.79		+/+	20.6	0.0	98.2	0.0	1.449	1.284	352.5	-42.4	15.854	0.300	5.585	137.5	7.3	28.0	101.5	1.377
44980.0	45175.1	0.252	60.0	25.7	1.50	0.853	78.2	0.346	0.766	155.4	461.0	0.501	1.030	-2.29	1.210	110.0	278.6	-6.1	0.425
45175.1	45320.0	0.425	262.5	10.0	4.15	1.094	69.6	0.371	0.636	130.4	390.6	0.400	0.872	-2.14	1.800	98.2	268.5	-6.1	0.631
5.55	16.62		+/+	22.8	0.0	104.2	0.0	1.468	1.284	358.6	-45.4	15.475	0.327	5.065	134.5	8.3	30.7	100.9	1.331
44990.0	45178.5	0.225	64.1	25.3	1.06	0.848	80.5	0.332	0.761	159.7	460.6	0.509	1.014	-2.72	1.208	109.2	284.2	-7.6	0.410
45178.5	45320.0	0.410	267.3	10.7	4.24	1.091	70.4	0.360	0.632	131.3	385.9	0.404	0.860	-2.56	1.798	96.8	270.8	-7.7	0.598
5.12	15.64		+/+	24.8	0.0	109.7	0.0	1.485	1.284	4.1	-47.7	15.184	0.353	4.656	132.3	9.4	33.2	100.5	1.289
45000.0	45181.5	0.202	65.9	24.5	0.70	0.843	83.0	0.321	0.758	164.7	460.3	0.514	1.002	-3.03	1.206	108.5	289.1	-8.8	0.397
45181.5	45320.0	0.398	271.5	11.3	4.36	1.088	71.1	0.352	0.629	132.1	381.9	0.408	0.850	-2.94	1.795	95.6	272.9	-9.2	0.571
4.78	14.85		+/+	26.6	0.0	114.6	0.0	1.499	1.284	8.8	-49.2	14.968	0.375	4.342	130.7	10.3	35.6	100.2	1.253
45010.0	45184.0	0.184	64.5	23.3	0.42	0.839	85.7	0.313	0.756	170.5	460.0	0.519	0.993	-3.23	1.205	108.1	293.2	-9.6	0.388
45184.0	45320.0	0.388	274.9	12.0	4.48	1.085	71.7	0.345	0.626	132.9	378.6	0.410	0.843	-3.28	1.793	94.8	274.5	-10.7	0.550
4.53	14.25		+/+	28.2	0.0	118.6	0.0	1.511	1.284	12.6	-50.2	14.821	0.393	4.109	129.8	11.0	37.5	100.2	1.222

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
45020.0	45185.7	0.175	59.4	21.6	0.24	0.837	88.8	0.309	0.756	177.4	459.5	0.523	0.989	-3.34	1.205	107.8	296.1	-10.1	0.382
45185.7	45320.0	0.382	277.2	12.4	4.59	1.083	72.0	0.341	0.624	133.4	376.5	0.411	0.838	-3.51	1.792	94.2	275.7	-11.8	0.537
4.41	13.86		+/+	29.3	0.0	121.4	0.0	1.518	1.284	15.2	-50.5	14.748	0.405	3.954	129.5	11.3	38.9	100.2	1.197
45030.0	45186.1	0.180	50.6	19.5	0.20	0.838	92.6	0.308	0.760	186.0	458.6	0.526	0.993A	-3.38	1.208	107.7	297.1	-10.2	0.381
45186.1	45320.0	0.381	277.7	12.5	4.61	1.083	72.1	0.341	0.624	133.5	376.0	0.411	0.837	-3.56	1.792	94.1	275.9	-12.0	0.534
4.48	13.79		+/+	29.9	0.0	121.9	0.0	1.520	1.284	16.0	-50.1	14.781	0.407	3.881	129.9	11.3	39.2	100.1	1.174
45040.0	45183.9	0.210	40.0	17.3	0.41	0.847	97.6	0.314	0.772	197.3	456.5	0.529	1.014A	-3.45	1.216	107.9	294.7	-10.3	0.389
45183.9	45320.0	0.389	274.8	11.9	4.48	1.085	71.7	0.346	0.626	132.8	378.8	0.410	0.843	-3.26	1.793	94.8	274.5	-10.6	0.551
4.89	14.27		+/+	29.8	0.0	118.5	0.0	1.510	1.284	13.8	-48.7	15.055	0.392	3.893	131.3	11.0	37.4	99.6	1.134
45050.0	45176.6	0.288	29.3	16.0	1.28	0.878	104.9	0.341	0.809	214.1	451.6	0.533	1.085A	-3.91	1.239	109.0	285.4	-11.0	0.418
45176.6	45320.0	0.418	264.7	10.3	4.19	1.093	70.0	0.366	0.634	130.8	388.4	0.402	0.866	-2.33	1.799	97.5	269.6	-6.8	0.616
6.18	16.16	304.3	+/+	29.6	1.4	106.7	0.0	1.476	1.284	6.4	-46.3	15.976	0.339	4.101	133.7	11.1	31.9	97.1	0.986
ARRIVAL DATE = 2445322.0																			
44900.0	45143.9	0.620	356.1	8.4	8.05	0.885	54.0	0.614	0.815	142.9	479.4	0.314	1.315	6.28	1.236	127.5	219.8	7.8	0.790
45143.9	45322.0	0.790	210.9	6.2	5.69	1.121	50.4	0.641	0.668	135.6	452.7	0.240	1.096	2.24	1.854	123.4	247.4	2.6	1.331
13.71	37.28		+/+	8.9	0.0	54.3	0.0	1.291	1.253	306.6	10.1	25.453	0.095	12.837	167.6	16.4	3.2	107.4	1.122
44910.0	45148.1	0.559	5.4	12.3	6.82	0.881	57.9	0.565	0.807	142.2	475.5	0.351	1.264	4.62	1.232	124.0	228.6	6.6	0.717
45148.1	45322.0	0.718	218.9	6.4	5.09	1.117	54.2	0.590	0.663	133.3	443.5	0.272	1.054	1.36	1.851	118.8	251.2	1.8	1.205
12.16	33.56		+/+	9.7	0.0	61.1	0.0	1.317	1.253	313.9	0.9	23.254	0.115	11.878	173.4	14.1	6.0	107.2	1.251
44920.0	45152.4	0.504	14.5	15.8	5.75	0.878	61.3	0.523	0.800	142.1	472.3	0.382	1.219	3.16	1.228	121.1	237.1	5.1	0.656
45152.4	45322.0	0.656	226.5	6.6	4.65	1.113	57.4	0.546	0.658	131.6	435.1	0.299	1.017	0.64	1.848	114.8	254.7	1.0	1.097
10.83	30.34		+/+	10.7	0.0	68.0	0.0	1.343	1.253	321.0	-8.5	21.461	0.137	10.771	169.7	12.0	9.2	106.8	1.343
44930.0	45156.7	0.456	23.5	18.8	4.81	0.874	64.3	0.486	0.794	142.7	469.7	0.408	1.179	1.88	1.225	118.7	245.3	3.3	0.605
45156.7	45322.0	0.605	233.9	6.9	4.34	1.109	60.1	0.508	0.654	130.6	427.2	0.322	0.985	0.0	1.845	111.4	257.9	0.0	1.003
9.70	27.56		+/+	12.0	0.0	74.9	0.0	1.369	1.253	328.0	-17.3	20.012	0.162	9.593	161.9	10.1	12.4	106.1	1.390
44940.0	45161.0	0.413	32.3	21.2	3.96	0.871	67.1	0.454	0.787	143.8	467.6	0.430	1.144	0.74	1.221	116.6	253.2	1.4	0.562
45161.0	45322.0	0.562	240.9	7.2	4.12	1.105	62.3	0.476	0.649	130.1	419.8	0.340	0.958	-0.54	1.842	108.4	261.0	-1.0	0.921
8.72	25.15		+/+	13.6	0.0	81.7	0.0	1.393	1.253	335.0	-25.0	18.850	0.188	8.456	154.5	8.6	15.5	105.1	1.398
44950.0	45165.3	0.373	40.9	23.1	3.19	0.866	69.6	0.426	0.781	145.5	465.9	0.448	1.114	-0.25	1.218	114.9	260.8	-0.5	0.526
45165.3	45322.0	0.526	247.6	7.5	3.98	1.101	64.2	0.448	0.644	130.0	413.0	0.355	0.933	-1.04	1.839	105.7	263.9	-2.2	0.850
7.86	23.05		+/+	15.4	0.0	88.5	0.0	1.417	1.253	342.0	-31.5	17.920	0.214	7.441	148.3	7.7	18.5	104.0	1.381
44960.0	45169.4	0.337	49.0	24.4	2.50	0.862	72.0	0.402	0.775	147.7	464.6	0.463	1.086	-1.11	1.215	113.4	268.0	-2.5	0.495
45169.4	45322.0	0.495	253.9	7.9	3.90	1.097	65.9	0.426	0.640	130.3	406.6	0.367	0.913	-1.50	1.836	103.5	266.6	-3.4	0.789
7.12	21.24		+/+	17.5	0.0	95.1	0.0	1.439	1.253	348.9	-36.7	17.177	0.242	6.584	143.2	7.6	21.3	102.9	1.350
44970.0	45173.4	0.303	56.5	25.1	1.87	0.857	74.3	0.381	0.769	150.4	463.6	0.476	1.062	-1.83	1.212	112.1	274.8	-4.4	0.469
45173.4	45322.0	0.469	259.9	8.4	3.88	1.094	67.2	0.407	0.636	130.7	400.6	0.377	0.894	-1.94	1.833	101.4	269.1	-4.7	0.735
6.46	19.67		+/+	19.6	0.0	101.6	0.0	1.460	1.253	355.6	-40.7	16.581	0.269	5.884	139.2	8.1	24.1	102.0	1.315
44980.0	45177.2	0.272	62.9	25.2	1.32	0.851	76.6	0.363	0.764	153.7	462.8	0.487	1.041	-2.40	1.209	111.0	281.2	-6.1	0.447
45177.2	45322.0	0.447	265.5	8.9	3.90	1.090	68.4	0.391	0.632	131.4	395.2	0.384	0.879	-2.35	1.831	99.7	271.5	-6.2	0.689
5.89	18.32		+/+	21.7	0.0	107.7	0.0	1.479	1.253	2.0	-43.8	16.104	0.296	5.324	136.2	8.9	26.7	101.3	1.281
44990.0	45180.8	0.243	67.8	24.8	0.85	0.846	79.0	0.347	0.760	157.7	462.3	0.496	1.023	-2.84	1.207	110.1	287.0	-7.5	0.429
45180.8	45322.0	0.429	270.5	9.4	3.97	1.086	69.4	0.379	0.628	132.2	390.3	0.390	0.866	-2.75	1.828	98.2	273.7	-7.7	0.650
5.40	17.17		+/+	23.6	0.0	113.4	0.0	1.496	1.253	7.8	-46.1	15.722	0.322	4.885	133.9	9.9	29.2	100.8	1.251
45000.0	45184.0	0.217	70.6	24.0	0.46	0.841	81.5	0.334	0.756	162.3	461.9	0.503	1.009	-3.14	1.205	109.4	292.2	-8.7	0.414
45184.0	45322.0	0.414	274.9	10.0	4.06	1.083	70.2	0.369	0.624	133.0	386.0	0.394	0.855	-3.12	1.826	96.9	275.7	-9.2	0.618
5.00	16.24		+/+	25.4	0.0	118.5	0.0	1.511	1.253	12.8	-47.6	15.418	0.346	4.547	132.4	10.7	31.5	100.5	1.226
45010.0	45186.7	0.196	70.8	22.9	0.15	0.836	84.2	0.325	0.753	167.7	461.6	0.508	0.998	-3.33	1.203	108.8	296.8	-9.5	0.402
45186.7	45322.0	0.402	278.7	10.6	4.17	1.080	70.9	0.361	0.621	133.9	382.4	0.397	0.845	-3.46	1.823	95.9	277.5	-10.6	0.593
4.69	15.49		+/+	26.9	0.0	123.0	0.0	1.523	1.253	17.1	-48.5	15.191	0.366	4.294	131.5	11.3	33.5	100.5	1.205
45020.0	45188.8	0.182	67.2	21.5	-0.06	0.833	87.3	0.318	0.752	174.1	461.2	0.513	0.991	-3.41	1.203	108.4	300.2	-9.9	0.394
45188.8	45322.0	0.394	281.5	11.1	4.27	1.078	71.3	0.355	0.619	134.5	379.8	0.399	0.839	-3.72	1.822	95.1	278.7	-11.8	0.575
4.50	14.97		+/+	28.1	0.0	126.3	0.0	1.532	1.253	20.1	-48.8	15.038	0.381	4.120	131.2	11.6	35.1	100.6	1.189
45030.0	45189.8	0.179	59.9	19.8	-0.16	0.832	90.8	0.315	0.754	181.8	460.5	0.516	0.991A	-3.41	1.204	108.2	302.2	-10.1	0.390
45189.8	45322.0	0.390	282.8	11.4	4.33	1.076	71.6	0.353	0.618	134.9	378.4	0.400	0.836	-3.86	1.821	94.8	279.4	-12.5	0.566
4.47	14.72		+/+	28.8	0.0	128.0	0.0	1.536	1.253	21.7	-48.5	14.986	0.389	4.021	131.5	11.6	35.9	100.7	1.175
45040.0	45189.1	0.197	49.9	18.0	-0.09	0.836	95.3	0.318	0.761	191.6	459.1	0.519	1.003A	-3.39	1.209	108.3	301.7	-9.9	0.393
45189.1	45322.0	0.393	281.8	11.2	4.29	1.077	71.4	0.355	0.619	134.6	379.4	0.399	0.838	-3.76	1.822	95.0	278.9	-12.0	0.572
4.70	14.90		+/+	28.9	0.0	126.8	0.0	1.533	1.253	21.1	-47.3	15.111	0.383	4.006	132.7	11.2	35.3	100.6	1.152
45050.0	45184.9	0.249	39.4	16.5	0.33	0.854	101.4	0.332	0.783	205.0	455.9	0.523	1.043A	-3.49	1.223	108.9	296.6	-9.9	0.410
45184.9	45322.0	0.410	276.3	10.2	4.09	1.082	70.4	0.366	0.623	133.3	384.7	0.395	0.851	-3.24	1.825	96.6	276.3	-9.7	0.609
5.49	15.97		+/+	28.6	0.0	120.1	0.0	1.515	1.253	16.3	-45.1	15.705	0.352	4.055	134.9	10.5	32.2	99.7	1.077
ARRIVAL DATE = 2445324.0																			
44910.0	45150.1	0.613	5.1	11.7	7.43	0.881	54.4	0.612	0.807	143.4	479.8	0.313	1.301	5.18	1.232	127.3	229.6	6.5	0.784
45150.1	45324.0	0.784	220.4	5.6	5.06	1.114	50.6	0.639	0.660	136.3	451.0	0.238	1.082	1.14	1.885	122.9	254.7	1.3	1.348
13.53	37.78		+/+	9.2	0.0	64.2	0.0	1.329	1.219	315.6	5.7	25.309	0.096	12.526	171.7	16.0	2.1	108.5	1.109
44920.0	45154.4	0.552	14.6	15.2	6.13	0.878	58.2	0.564	0.800	142.8	476.1	0.349	1.251	3.50	1.228	124.0	238.4	5.0	0.714
45154.4	45324.0	0.714	228.3	5.7	4.55	1.110	54.3	0.590	0.655	134.2	442.0	0.268	1.041	0.38	1.882	118.4	258.3	0.5	1.223
11.99	34.07		+/+	10.0	0.0	71.1	0.0	1.355	1.219	322.9	-4.3	23.216	0.116	11.447	173.1	13.6	5.3	108.1	1.213
44930.0	45158.7	0.498	23.9	18.3	5.02	0.874	61.6	0.523	0.793	142.8	473.0	0.378	1.207	2.05	1.225	121.2	246.8	3.3	0.655
45158.7	45324.0	0.655	235.9	6.0	4.19	1.106	57.4	0.547	0.650	132.7	433.7	0.294	1.006	-0.26	1.879	114.5	261.6	-0.4	1.114
10.68	30.86		+/+	11.2	0.0	78.0	0.0	1.380	1.219	330.2	-13.8	21.519	0.138	10.236	165.4	11.6	8.6	107.2	1.275

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44940.0	45163.0	0.450	33.0	20.8	4.04	0.870	64.6	0.486	0.786	143.6	470.6	0.404	1.169	0.80	1.221	118.8	254.9	1.4	0.605
45163.0	45324.0	0.605	243.1	6.2	3.94	1.102	50.0	0.511	0.645	131.9	425.9	0.315	0.975	-0.82	1.876	111.1	264.7	-1.4	1.020
9.55	28.08		+/+	12.7	0.0	84.9	0.0	1.405	1.219	337.5	-22.1	20.150	0.162	9.026	157.5	10.1	11.8	106.1	1.297
44950.0	45167.3	0.406	42.0	22.7	3.17	0.865	67.4	0.455	0.780	144.8	468.6	0.425	1.134	-0.27	1.218	116.8	262.7	-0.5	0.563
45167.3	45324.0	0.563	250.0	6.5	3.76	1.097	62.2	0.480	0.640	131.6	418.7	0.333	0.948	-1.31	1.873	108.2	267.5	-2.5	0.939
8.57	25.67		+/+	14.5	0.0	91.8	0.0	1.428	1.219	344.7	-29.0	19.048	0.187	7.927	150.8	9.1	14.7	104.9	1.293
44960.0	45171.5	0.366	50.5	24.0	2.40	0.861	70.0	0.427	0.774	146.7	467.0	0.443	1.104	-1.19	1.215	115.0	270.1	-2.5	0.528
45171.5	45324.0	0.528	256.6	6.8	3.66	1.093	64.1	0.454	0.636	131.6	412.1	0.347	0.925	-1.75	1.870	105.7	270.2	-3.6	0.868
7.71	23.58		+/+	16.4	0.0	98.5	0.0	1.450	1.219	351.9	-34.5	18.157	0.213	6.994	145.4	8.7	17.6	103.6	1.274
44970.0	45175.6	0.329	58.5	24.6	1.71	0.855	72.4	0.403	0.768	149.1	465.7	0.458	1.077	-1.94	1.211	113.5	277.2	-4.3	0.498
45175.6	45324.0	0.498	262.7	7.2	3.60	1.089	65.6	0.433	0.631	131.9	405.9	0.358	0.905	-2.17	1.867	103.4	272.7	-4.9	0.807
6.96	21.78		+/+	18.5	0.0	105.0	0.0	1.471	1.219	358.8	-38.7	17.432	0.239	6.231	141.3	9.0	20.3	102.6	1.250
44980.0	45179.5	0.295	65.5	24.7	1.12	0.850	74.9	0.382	0.763	152.1	464.8	0.471	1.054	-2.53	1.208	112.3	283.7	-6.0	0.472
45179.5	45324.0	0.473	268.4	7.6	3.60	1.085	67.0	0.415	0.627	132.5	400.2	0.367	0.887	-2.56	1.864	101.5	275.1	-6.2	0.754
6.30	20.22		+/+	20.5	0.0	111.3	0.0	1.490	1.219	5.4	-41.9	16.840	0.265	5.625	138.1	9.6	22.9	101.8	1.228
44990.0	45183.1	0.264	71.2	24.2	0.61	0.844	77.3	0.365	0.758	155.7	464.1	0.481	1.034	-2.98	1.206	111.2	289.9	-7.4	0.451
45183.1	45324.0	0.451	273.7	8.1	3.63	1.081	68.1	0.400	0.623	133.2	395.1	0.374	0.872	-2.94	1.862	99.8	277.2	-7.6	0.709
5.75	18.88		+/+	22.4	0.0	117.2	0.0	1.507	1.219	11.5	-44.2	16.354	0.291	5.151	135.8	10.4	25.3	101.2	1.208
45000.0	45186.5	0.235	75.1	23.4	0.19	0.838	79.9	0.350	0.753	160.0	463.6	0.490	1.017	-3.28	1.203	110.3	295.4	-8.6	0.433
45186.5	45324.0	0.433	278.4	8.6	3.70	1.077	69.1	0.388	0.619	134.1	390.5	0.379	0.860	-3.29	1.859	98.4	279.2	-9.1	0.671
5.28	17.77		+/+	24.1	0.0	122.6	0.0	1.522	1.219	16.9	-45.7	15.955	0.315	4.785	134.3	11.2	27.6	100.9	1.194
45010.0	45189.4	0.211	76.5	22.3	-0.14	0.833	82.6	0.338	0.750	165.0	463.3	0.497	1.004	-3.46	1.201	109.6	300.2	-9.4	0.419
45189.4	45324.0	0.419	282.4	9.1	3.79	1.074	69.9	0.378	0.616	134.9	386.6	0.383	0.849	-3.61	1.857	97.2	280.9	-10.4	0.640
4.90	16.87		+/+	25.6	0.0	127.3	0.0	1.535	1.219	21.5	-46.5	15.634	0.337	4.510	133.5	11.7	29.7	100.8	1.184
45020.0	45191.8	0.192	74.7	21.1	-0.38	0.829	85.6	0.329	0.748	170.9	462.9	0.502	0.995	-3.52	1.200	109.1	304.2	-9.8	0.408
45191.8	45324.0	0.408	285.7	9.6	3.88	1.071	70.5	0.371	0.614	135.6	383.5	0.386	0.841	-3.89	1.855	96.3	282.3	-11.7	0.617
4.64	16.19		+/+	26.8	0.0	131.2	0.0	1.545	1.219	25.0	-46.8	15.395	0.356	4.313	133.2	12.0	31.4	101.0	1.178
45030.0	45193.4	0.183	69.1	19.7	-0.51	0.826	89.0	0.324	0.749	177.9	462.4	0.506	0.991	-3.49	1.201	108.8	307.0	-9.9	0.401
45193.4	45324.0	0.402	287.8	10.0	3.96	1.069	70.9	0.367	0.612	136.1	381.4	0.387	0.836	-4.07	1.854	95.7	283.3	-12.6	0.602
4.52	15.76		+/+	27.6	0.0	133.7	0.0	1.551	1.219	27.3	-46.5	15.251	0.367	4.192	133.5	12.0	32.5	101.2	1.173
45040.0	45193.6	0.190	60.2	18.3	-0.52	0.828	93.1	0.324	0.753	186.5	461.4	0.509	0.997A	-3.40	1.204	108.7	307.9	-9.7	0.400
45193.6	45324.0	0.401	288.1	10.1	3.97	1.069	71.0	0.367	0.612	136.2	381.1	0.387	0.836	-4.11	1.853	95.6	283.4	-12.7	0.600
4.61	15.70		+/+	27.9	0.0	134.1	0.0	1.552	1.219	27.8	-45.4	15.255	0.369	4.147	134.6	11.5	32.7	101.4	1.162
45050.0	45191.6	0.223	49.8	17.1	-0.33	0.838	98.4	0.331	0.766	197.7	459.3	0.512	1.020A	-3.33	1.213	109.1	305.6	-9.4	0.409
45191.6	45324.0	0.409	285.4	9.6	3.87	1.072	70.5	0.372	0.614	135.5	383.8	0.385	0.842	-3.86	1.855	96.4	282.2	-11.6	0.619
5.08	16.25		+/+	27.7	0.0	130.8	0.0	1.544	1.219	25.4	-43.5	15.562	0.353	4.179	136.5	10.7	31.2	101.1	1.123
45060.0	45184.9	0.303	40.0	16.6	0.36	0.871	105.9	0.360	0.804	213.7	454.6	0.515	1.093A	-3.55	1.237	110.3	297.2	-9.4	0.442
45184.9	45324.0	0.442	276.2	8.4	3.66	1.079	68.7	0.393	0.621	133.6	392.7	0.377	0.866	-3.12	1.860	99.1	278.3	-8.3	0.688
6.46	18.29	352.9	+/+	27.5	1.5	120.0	0.0	1.515	1.219	18.1	-40.5	16.529	0.303	4.460	139.5	9.8	26.5	99.0	0.976
									ARRIVAL DATE = 2445326.0										
44920.0	45156.4	0.608	14.3	14.6	6.62	0.877	54.6	0.611	0.799	143.9	480.4	0.311	1.288	3.93	1.228	127.4	239.4	4.9	0.782
45156.4	45326.0	0.782	229.9	4.8	4.39	1.107	50.6	0.541	0.652	137.2	449.8	0.234	1.069	0.08	1.920	122.6	262.1	0.1	1.368
13.39	38.38		+/+	9.4	0.0	74.2	0.0	1.367	1.182	324.7	0.7	25.303	0.097	12.149	175.1	15.6	1.2	109.5	1.079
44930.0	45160.7	0.547	24.0	17.7	5.28	0.873	58.4	0.565	0.792	143.5	476.8	0.345	1.240	2.28	1.225	124.1	248.1	3.2	0.714
45160.7	45326.0	0.714	237.8	5.0	3.97	1.102	54.2	0.593	0.646	135.3	440.9	0.263	1.030	-0.57	1.916	118.2	265.6	-0.8	1.243
11.86	34.66		+/+	10.5	0.0	81.2	0.0	1.392	1.182	332.3	-9.5	23.305	0.116	10.948	169.6	13.4	4.7	108.7	1.156
44940.0	45165.1	0.493	33.6	20.3	4.13	0.869	61.7	0.524	0.785	143.7	473.9	0.374	1.197	0.88	1.221	121.3	256.5	1.4	0.656
45165.1	45326.0	0.656	245.3	5.2	3.68	1.098	57.2	0.552	0.641	134.0	432.7	0.287	0.995	-1.12	1.913	114.4	268.7	-1.7	1.134
10.55	31.44		+/+	11.9	0.0	88.2	0.0	1.416	1.182	339.8	-18.6	21.687	0.137	9.677	161.1	11.7	8.0	107.4	1.193
44950.0	45169.4	0.444	42.9	22.2	3.14	0.864	64.8	0.488	0.779	144.5	471.6	0.399	1.159	-0.30	1.218	119.0	264.6	-0.5	0.608
45169.4	45326.0	0.608	252.4	5.4	3.47	1.093	59.8	0.517	0.636	133.4	425.2	0.307	0.965	-1.60	1.910	111.1	271.6	-2.7	1.040
9.42	28.65		+/+	13.5	0.0	95.1	0.0	1.439	1.182	347.3	-26.0	20.377	0.160	8.491	153.8	10.5	11.0	105.9	1.201
44960.0	45173.6	0.400	51.8	23.5	2.28	0.859	67.6	0.457	0.773	146.0	469.7	0.420	1.125	-1.28	1.214	116.9	272.2	-2.4	0.567
45173.6	45326.0	0.567	259.1	5.7	3.34	1.089	61.9	0.487	0.632	133.1	418.2	0.324	0.939	-2.03	1.907	108.2	274.3	-3.8	0.958
8.43	26.23		+/+	15.4	0.0	101.9	0.0	1.461	1.182	354.7	-31.9	19.310	0.184	7.472	148.0	10.0	13.9	104.6	1.194
44970.0	45177.8	0.359	60.3	24.1	1.53	0.854	70.3	0.429	0.767	148.0	468.2	0.437	1.096	-2.08	1.211	115.2	279.5	-4.3	0.532
45177.8	45326.0	0.532	265.5	6.0	3.26	1.084	63.8	0.462	0.627	133.3	411.7	0.337	0.917	-2.42	1.904	105.7	276.8	-5.0	0.887
7.57	24.14		+/+	17.3	0.0	108.6	0.0	1.481	1.182	1.9	-36.4	18.435	0.209	6.638	143.6	10.0	16.6	103.4	1.181
44980.0	45181.7	0.322	67.8	24.1	0.88	0.848	72.9	0.406	0.761	150.6	467.0	0.452	1.070	-2.70	1.208	113.8	286.3	-6.0	0.502
45181.7	45326.0	0.502	271.4	6.3	3.23	1.080	65.4	0.441	0.622	133.7	405.7	0.348	0.897	-2.78	1.901	103.6	279.1	-6.2	0.826
6.82	22.33		+/+	19.3	0.0	115.0	0.0	1.500	1.182	8.7	-39.7	17.710	0.235	5.975	140.3	10.5	19.2	102.4	1.168
44990.0	45185.5	0.288	74.3	23.6	0.34	0.842	75.5	0.385	0.756	153.9	466.1	0.465	1.047	-3.16	1.205	112.5	292.7	-7.4	0.477
45185.5	45326.0	0.477	276.9	6.7	3.23	1.076	66.7	0.424	0.618	134.4	400.3	0.356	0.880	-3.12	1.898	101.7	281.3	-7.5	0.773
6.18	20.78		+/+	21.1	0.0	121.0	0.0	1.518	1.182	15.1	-42.0	17.104	0.260	5.456	138.0	11.1	21.7	101.8	1.160
45000.0	45189.0	0.257	79.1	22.7	-0.10	0.836	78.1	0.368	0.751	157.8	465.5	0.475	1.028	-3.46	1.202	111.5	298.6	-8.5	0.456
45189.0	45326.0	0.456	281.9	7.1	3.27	1.072	67.8	0.410	0.614	135.1	395.4	0.363	0.866	-3.45	1.895	100.1	283.3	-8.9	0.728
5.63	19.46		+/+	22.8	0.0	126.7	0.0	1.533	1.182	20.9	-43.5	16.595	0.285	5.057	136.5	11.8	23.9	101.4	1.156
45010.0	45192.2	0.229	81.8	21.6	-0.45	0.830	80.8	0.354	0.748	162.4	465.0	0.483	1.012	-3.62	1.200	110.6	303.8	-9.3	0.439
45192.2	45326.0	0.439	286.3	7.6	3.34	1.068	68.8	0.398	0.611	136.0	391.1	0.367	0.854	-3.75	1.893	98.7	285.0	-10.2	0.691
5.18	18.37		+/+	24.3	0.0	131.8	0.0	1.546	1.182	25.8	-44.3	16.172	0.308	4.755	135.7	12.3	26.0	101.3	1.156
45020.0	45194.8	0.206	81.6	20.4	-0.71	0.825	83.8	0.343	0.745	167.8	464.7	0.490	1.000	-3.66	1.198	110.0	308.2	-9.7	0.425
45194.8	45326.0	0.425	289.9	8.0	3.41	1.065	69.6	0.390	0.608	136.8	387.6	0.371	0.845	-4.01	1.891	97.7	286.5	-11.4	0.662
4.84	17.52		+/+	25.5	0.0	136.1	0.0	1.557	1.182	29.8	-44.5	15.833	0.328	4.535	135.5	12.5	27.8	101.5	1.160

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
45030.0	45196.8	0.191	77.9	19.2	-0.87	0.821	87.1	0.335	0.744	174.2	464.2	0.495	0.993	-3.59	1.198	109.5	311.6	-9.8	0.415
45196.8	45326.0	0.415	292.5	8.4	3.49	1.062	70.1	0.384	0.605	137.4	385.1	0.373	0.838	-4.22	1.889	96.9	287.6	-12.4	0.642
4.63	16.92		+/+	26.3	0.0	139.3	0.0	1.565	1.182	32.7	-44.1	15.591	0.344	4.390	135.9	12.5	29.2	101.8	1.165
45040.0	45197.8	0.189	70.6	18.2	-0.93	0.820	90.9	0.332	0.746	181.9	463.5	0.498	0.994A	-3.46	1.200	109.3	313.6	-9.6	0.410
45197.8	45326.0	0.411	293.8	8.6	3.53	1.061	70.4	0.381	0.604	137.7	383.8	0.374	0.835	-4.33	1.888	96.5	288.2	-13.0	0.632
4.60	16.63		+/+	26.8	0.0	140.9	0.0	1.569	1.182	34.1	-43.0	15.480	0.351	4.317	137.0	12.0	29.9	102.2	1.166
45050.0	45197.2	0.208	60.7	17.3	-0.85	0.825	95.7	0.335	0.754	191.5	462.1	0.501	1.006A	-3.29	1.205	109.4	313.3	-9.1	0.414
45197.2	45326.0	0.414	293.0	8.5	3.50	1.062	70.2	0.383	0.605	137.5	384.6	0.373	0.837	-4.26	1.889	96.8	287.8	-12.6	0.638
4.85	16.82		+/+	26.8	0.0	139.9	0.0	1.566	1.182	33.4	-41.3	15.595	0.346	4.318	138.7	11.2	29.5	102.3	1.149
45060.0	45193.5	0.260	50.7	16.8	-0.53	0.844	101.9	0.350	0.775	204.3	459.1	0.504	1.047A	-3.22	1.220	110.1	308.9	-8.6	0.432
45193.5	45326.0	0.432	288.1	7.8	3.37	1.066	69.2	0.394	0.609	136.4	389.4	0.369	0.849	-3.88	1.892	98.2	285.8	-10.8	0.676
5.68	17.94		+/+	26.4	0.0	133.9	0.0	1.552	1.182	28.8	-38.5	16.223	0.318	4.375	141.5	9.9	26.9	101.8	1.073
									ARRIVAL DATE = 2445328.0										
44930.0	45162.7	0.604	23.9	17.0	5.60	0.873	54.6	0.614	0.792	144.6	481.2	0.306	1.278	2.57	1.225	127.6	249.2	3.2	0.784
45162.7	45328.0	0.784	239.4	4.0	3.66	1.099	50.4	0.645	0.643	138.3	449.2	0.228	1.057	-0.94	1.956	122.6	269.7	-1.1	1.391
13.30	39.08	64.6	+/+	9.8	0.2	84.4	0.0	1.403	1.141	334.1	-4.5	25.399	0.096	11.892	174.3	15.5	1.2	110.2	1.032
44940.0	45167.1	0.543	33.8	19.7	4.24	0.868	58.4	0.568	0.785	144.2	477.8	0.339	1.230	0.98	1.221	124.3	257.9	1.4	0.717
45167.1	45328.0	0.717	247.2	4.1	3.33	1.094	53.9	0.599	0.637	136.6	440.4	0.256	1.019	-1.48	1.953	118.2	273.0	-2.0	1.265
11.77	35.32		+/+	11.0	0.0	91.5	0.0	1.427	1.141	341.9	-14.3	23.514	0.115	10.406	165.4	13.6	4.2	109.0	1.084
44950.0	45171.5	0.488	43.5	21.7	3.10	0.864	61.8	0.527	0.778	144.5	474.9	0.368	1.188	-0.33	1.218	121.6	266.3	-0.5	0.660
45171.5	45328.0	0.660	254.6	4.3	3.10	1.089	56.9	0.559	0.632	135.5	432.4	0.279	0.985	-1.93	1.949	114.5	276.1	-3.0	1.155
10.45	32.08		+/+	12.6	0.0	98.5	0.0	1.450	1.141	349.7	-22.5	21.952	0.136	9.135	157.4	12.2	7.3	107.3	1.105
44960.0	45175.8	0.439	52.9	23.0	2.13	0.858	65.0	0.491	0.771	145.5	472.7	0.392	1.150	-1.40	1.214	119.2	274.2	-2.4	0.612
45175.8	45328.0	0.612	261.6	4.5	2.94	1.084	59.4	0.525	0.627	135.0	424.9	0.298	0.956	-2.33	1.946	111.3	278.8	-4.0	1.060
9.31	29.26		+/+	14.3	0.0	105.4	0.0	1.472	1.141	357.3	-28.9	20.675	0.158	8.024	151.1	11.4	10.2	105.7	1.109
44970.0	45180.0	0.394	61.8	23.6	1.31	0.853	67.9	0.460	0.765	147.1	470.8	0.413	1.117	-2.25	1.211	117.2	281.7	-4.2	0.572
45180.0	45328.0	0.572	268.2	4.7	2.84	1.079	61.6	0.496	0.622	134.8	418.1	0.313	0.931	-2.68	1.943	108.5	281.4	-5.1	0.978
8.31	26.82		+/+	16.2	0.0	112.1	0.0	1.492	1.141	4.8	-33.7	19.620	0.181	7.105	146.3	11.2	13.0	104.3	1.106
44980.0	45184.0	0.354	69.9	23.6	0.61	0.847	70.7	0.433	0.759	149.4	469.4	0.431	1.088	-2.90	1.207	115.5	288.8	-5.9	0.537
45184.0	45328.0	0.537	274.4	5.0	2.79	1.075	63.4	0.472	0.617	135.1	411.8	0.326	0.909	-3.01	1.940	106.0	283.7	-6.2	0.906
7.45	24.71		+/+	18.1	0.0	118.6	0.0	1.511	1.141	11.9	-37.2	18.738	0.205	6.374	142.8	11.4	15.6	103.2	1.103
44990.0	45187.9	0.316	76.9	23.0	0.04	0.840	73.4	0.409	0.754	152.2	468.3	0.446	1.063	-3.37	1.204	114.0	295.5	-7.3	0.508
45187.9	45328.0	0.508	280.1	5.3	2.77	1.070	65.0	0.452	0.613	135.6	406.1	0.336	0.890	-3.31	1.937	103.9	285.9	-7.4	0.845
6.71	22.90		+/+	19.8	0.0	124.9	0.0	1.528	1.141	18.6	-39.6	17.993	0.230	5.804	140.4	11.9	18.1	102.5	1.104
45000.0	45191.5	0.282	82.6	22.0	-0.43	0.834	76.1	0.389	0.749	155.7	467.5	0.458	1.041	-3.67	1.201	112.8	301.6	-8.4	0.483
45191.5	45328.0	0.483	285.3	5.6	2.78	1.065	66.3	0.435	0.609	136.3	400.9	0.344	0.874	-3.60	1.934	102.1	287.9	-8.6	0.792
6.07	21.35		+/+	21.5	0.0	130.8	0.0	1.544	1.141	24.7	-41.0	17.359	0.254	5.364	138.9	12.4	20.3	102.1	1.110
45010.0	45194.9	0.251	86.4	20.8	-0.80	0.827	78.9	0.372	0.745	159.9	466.9	0.468	1.022	-3.81	1.199	111.8	307.2	-9.2	0.461
45194.9	45328.0	0.462	289.9	6.0	2.82	1.061	67.5	0.421	0.605	137.1	396.3	0.350	0.860	-3.86	1.931	100.6	289.6	-9.8	0.748
5.53	20.05		+/+	22.9	0.0	136.1	0.0	1.557	1.141	30.0	-41.7	16.819	0.278	5.030	138.2	12.8	22.5	102.0	1.120
45020.0	45197.8	0.225	87.8	19.6	-1.07	0.821	81.8	0.359	0.742	164.9	466.5	0.476	1.008	-3.83	1.196	111.0	312.0	-9.7	0.444
45197.8	45328.0	0.445	293.9	6.4	2.87	1.057	68.4	0.410	0.602	137.9	392.4	0.355	0.849	-4.10	1.929	99.3	291.2	-11.0	0.712
5.11	18.99		+/+	24.1	0.0	140.9	0.0	1.569	1.141	34.5	-41.8	16.372	0.300	4.785	138.1	13.1	24.3	102.2	1.134
45030.0	45200.1	0.204	86.0	18.4	-1.24	0.817	85.1	0.349	0.740	170.7	466.1	0.482	0.998	-3.74	1.195	110.3	316.0	-9.7	0.431
45200.1	45328.0	0.432	297.1	6.7	2.93	1.054	69.1	0.403	0.599	138.6	389.4	0.358	0.840	-4.30	1.927	98.3	292.4	-12.1	0.685
4.80	18.20		+/+	25.0	0.0	144.7	0.0	1.578	1.141	37.9	-41.3	16.022	0.318	4.614	138.7	13.0	25.9	102.5	1.149
45040.0	45201.7	0.194	80.6	17.6	-1.33	0.814	88.7	0.343	0.740	177.6	465.5	0.486	0.994	-3.56	1.196	110.0	318.9	-9.5	0.423
45201.7	45328.0	0.423	299.2	7.0	2.98	1.052	69.6	0.398	0.597	139.2	387.3	0.360	0.835	-4.45	1.926	97.7	293.3	-12.8	0.667
4.66	17.68		+/+	25.6	0.0	147.3	0.0	1.584	1.141	40.1	-40.2	15.796	0.330	4.513	139.8	12.6	27.0	103.0	1.161
45050.0	45202.1	0.200	71.9	17.0	-1.31	0.815	93.1	0.342	0.744	186.0	464.5	0.490	0.999A	-3.33	1.199	109.9	320.0	-8.9	0.422
45202.1	45328.0	0.422	299.6	7.0	2.99	1.051	69.7	0.396	0.597	139.3	386.9	0.360	0.833	-4.48	1.925	97.5	293.5	-13.0	0.664
4.75	17.57		+/+	25.8	0.0	147.8	0.0	1.585	1.141	40.5	-38.5	15.756	0.333	4.481	141.5	11.9	27.2	103.5	1.160
45060.0	45200.4	0.232	61.8	16.8	-1.15	0.825	98.6	0.350	0.757	196.7	462.6	0.492	1.022A	-3.11	1.208	110.3	318.2	-8.2	0.430
45200.4	45328.0	0.431	297.4	6.7	2.94	1.054	69.2	0.402	0.599	138.7	389.1	0.358	0.839	-4.32	1.927	98.2	292.6	-12.2	0.682
5.23	18.12		+/+	25.6	0.0	145.0	0.0	1.579	1.141	38.3	-36.0	16.063	0.320	4.514	144.0	10.7	26.0	103.5	1.123
45070.0	45194.8	0.309	52.6	17.1	-0.68	0.857	106.1	0.376	0.792	211.4	458.4	0.494	1.091A	-3.07	1.232	111.5	311.3	-7.6	0.462
45194.8	45328.0	0.462	289.8	6.0	2.81	1.061	67.4	0.422	0.605	137.1	396.5	0.350	0.860	-3.85	1.931	100.6	289.6	-9.8	0.749
6.56	20.09	308.9	+/+	25.4	1.3	136.0	0.0	1.557	1.141	31.8	-32.6	17.022	0.277	4.790	147.4	8.9	22.4	101.9	0.984
									ARRIVAL DATE = 2445330.0										
44940.0	45169.2	0.603	33.7	19.0	4.39	0.868	54.4	0.618	0.784	145.3	482.2	0.300	1.269	1.11	1.221	127.9	259.1	1.4	0.789
45169.2	45330.0	0.789	249.0	3.0	2.87	1.090	50.0	0.652	0.633	139.6	449.1	0.220	1.046	-1.90	1.994	122.9	277.6	-2.2	1.417
13.26	39.84	294.7	+/+	10.3	0.7	94.8	0.0	1.438	1.097	344.0	-9.4	25.536	0.095	12.031	170.3	15.8	2.3	110.5	0.970
44950.0	45173.6	0.541	43.8	21.1	3.06	0.863	58.3	0.572	0.777	145.0	478.8	0.333	1.222	-0.37	1.218	124.7	267.7	-0.5	0.723
45173.6	45330.0	0.723	256.7	3.2	2.62	1.084	53.5	0.607	0.628	138.0	440.5	0.246	1.009	-2.32	1.991	118.6	280.8	-3.1	1.289
11.72	36.04	170.2	+/+	11.6	0.5	101.9	0.0	1.461	1.097	352.0	-18.4	23.735	0.113	10.259	161.5	14.1	4.0	108.8	1.005
44960.0	45177.9	0.486	53.6	22.4	1.96	0.858	61.8	0.531	0.771	145.5	476.1	0.361	1.180	-1.55	1.214	121.9	276.0	-2.4	0.667
45177.9	45330.0	0.667	264.0	3.3	2.45	1.079	56.5	0.568	0.622	137.1	432.6	0.269	0.976	-2.67	1.987	114.9	283.7	-4.1	1.178
10.38	32.74	117.0	+/+	13.3	0.3	108.8	0.0	1.482	1.097	359.9	-25.5	22.232	0.133	8.877	154.5	13.1	6.7	107.0	1.020
44970.0	45182.2	0.436	63.0	23.0	1.05	0.852	65.1	0.495	0.764	146.6	473.9	0.386	1.143	-2.46	1.210	119.5	283.8	-4.2	0.619
45182.2	45330.0	0.619	270.8	3.5	2.34	1.074	59.0	0.535	0.617	136.7	425.3	0.287	0.948	-2.98	1.984	111.7	286.3	-5.1	1.081
9.23	29.88	94.7	+/+	15.0	0.3	115.7	0.0	1.502	1.097	7.7	-30.7	20.973	0.155	7.790	149.3	12.6	9.5	105.4	1.027

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
44980.0	45186.3	0.390	71.6	23.0	0.30	0.845	68.1	0.464	0.758	148.4	472.1	0.406	1.110	-3.15	1.207	117.5	291.2	-5.8	0.578
45186.3	45330.0	0.578	277.2	3.7	2.26	1.069	51.1	0.507	0.612	136.7	418.6	0.302	0.923	-3.26	1.981	108.9	288.8	-6.1	0.998
8.23	27.41	73.5	+/+	16.8	0.2	122.4	0.0	1.521	1.097	15.1	-34.4	19.917	0.177	6.928	145.5	12.6	12.1	104.2	1.032
44990.0	45190.3	0.349	79.3	22.4	-0.31	0.839	71.0	0.437	0.752	150.8	470.7	0.424	1.081	-3.63	1.203	115.8	298.1	-7.3	0.543
45190.3	45330.0	0.544	283.2	3.9	2.22	1.064	63.0	0.483	0.608	137.0	412.6	0.314	0.901	-3.51	1.977	106.5	291.0	-7.2	0.926
7.35	25.29	37.2	+/+	18.6	0.1	128.7	0.0	1.538	1.097	22.0	-36.9	19.029	0.201	6.236	143.1	12.9	14.5	103.3	1.041
45000.0	45194.1	0.311	85.7	21.3	-0.80	0.832	73.8	0.413	0.747	153.9	469.7	0.438	1.056	-3.93	1.200	114.3	304.6	-8.4	0.514
45194.1	45330.0	0.514	288.7	4.1	2.21	1.059	64.6	0.463	0.603	137.5	407.1	0.324	0.883	-3.74	1.974	104.5	293.0	-8.3	0.864
6.61	23.46		+/+	20.2	0.0	134.8	0.0	1.554	1.097	28.3	-38.4	18.272	0.224	5.705	141.6	13.2	16.8	102.9	1.055
45010.0	45197.6	0.277	90.6	20.0	-1.19	0.825	76.7	0.394	0.743	157.6	469.0	0.450	1.035	-4.06	1.197	113.1	310.5	-9.2	0.489
45197.6	45330.0	0.489	293.6	4.4	2.23	1.054	65.9	0.447	0.599	138.3	402.1	0.331	0.867	-3.96	1.971	102.7	294.8	-9.4	0.811
5.98	21.90		+/+	21.6	0.0	140.5	0.0	1.568	1.097	34.0	-39.0	17.603	0.248	5.335	140.9	13.5	19.0	102.8	1.074
45020.0	45200.7	0.247	93.3	18.6	-1.46	0.818	79.7	0.378	0.739	162.1	468.4	0.460	1.018	-4.05	1.195	112.1	315.8	-9.6	0.468
45200.7	45330.0	0.468	298.0	4.7	2.26	1.049	67.1	0.434	0.596	139.1	397.8	0.337	0.854	-4.17	1.969	101.2	296.5	-10.5	0.767
5.46	20.61		+/+	22.8	0.0	145.6	0.0	1.580	1.097	38.8	-38.9	17.032	0.270	5.058	141.0	13.7	20.9	103.0	1.097
45030.0	45203.4	0.222	93.4	17.4	-1.64	0.812	82.9	0.365	0.736	167.3	468.0	0.467	1.005	-3.92	1.193	111.4	320.3	-9.7	0.451
45203.4	45330.0	0.451	301.5	4.9	2.30	1.046	68.0	0.424	0.592	139.9	394.3	0.341	0.843	-4.34	1.967	100.0	297.8	-11.6	0.732
5.07	19.59		+/+	23.8	0.0	150.0	0.0	1.590	1.097	42.8	-38.2	16.565	0.291	4.859	141.7	13.6	22.6	103.4	1.122
45040.0	45205.4	0.205	90.0	16.6	-1.74	0.808	86.5	0.356	0.735	173.6	467.5	0.473	0.997	-3.70	1.192	110.8	323.8	-9.4	0.439
45205.4	45330.0	0.439	304.2	5.2	2.34	1.043	68.7	0.417	0.590	140.6	391.7	0.344	0.836	-4.48	1.965	99.2	298.9	-12.4	0.708
4.81	18.86		+/+	24.4	0.0	153.2	0.0	1.597	1.097	45.6	-36.9	16.219	0.307	4.728	143.0	13.3	23.8	104.0	1.144
45050.0	45206.5	0.200	82.9	16.2	-1.75	0.807	90.6	0.352	0.737	181.1	466.8	0.478	0.996A	-3.42	1.194	110.6	326.0	-8.9	0.433
45206.5	45330.0	0.433	305.6	5.3	2.37	1.041	69.0	0.413	0.589	140.9	390.3	0.346	0.832	-4.56	1.964	98.7	299.4	-12.8	0.695
4.75	18.48		+/+	24.8	0.0	155.0	0.0	1.601	1.097	47.0	-35.1	16.039	0.316	4.662	144.8	12.6	24.5	104.6	1.156
45060.0	45206.1	0.217	73.5	16.4	-1.66	0.811	95.5	0.354	0.744	190.2	465.5	0.481	1.008A	-3.12	1.199	110.6	326.1	-8.1	0.435
45206.1	45330.0	0.435	305.1	5.3	2.36	1.042	68.9	0.414	0.589	140.8	390.8	0.345	0.833	-4.53	1.964	98.9	299.2	-12.7	0.699
4.99	18.61		+/+	24.8	0.0	154.4	0.0	1.599	1.097	46.5	-32.7	16.122	0.313	4.657	147.3	11.6	24.3	105.0	1.143
45070.0	45203.2	0.266	63.8	16.9	-1.42	0.829	101.9	0.368	0.764	202.2	462.8	0.483	1.045A	-2.86	1.213	111.3	322.8	-7.2	0.452
45203.2	45330.0	0.452	301.3	4.9	2.29	1.046	67.9	0.424	0.593	139.8	394.5	0.341	0.844	-4.33	1.967	100.1	297.8	-11.5	0.735
5.78	19.66		+/+	24.6	0.0	149.7	0.0	1.589	1.097	42.7	-29.6	16.729	0.289	4.697	150.3	9.9	22.4	104.7	1.069

ARRIVAL DATE = 2445332.0

44950.0	45175.7	0.603	43.8	20.3	3.00	0.863	54.2	0.624	0.777	146.1	483.3	0.292	1.262	-0.42	1.218	128.4	268.9	-0.5	0.797
45175.7	45332.0	0.797	258.5	2.1	2.00	1.080	49.4	0.562	0.623	141.1	449.7	0.211	1.036	-2.79	2.033	123.4	285.8	-3.3	1.444
13.26	40.65	587.1	+/+	10.8	1.4	105.3	0.0	1.471	1.050	354.2	-13.8	25.757	0.093	12.258	166.2	16.3	3.9	110.4	0.900
44960.0	45180.1	0.540	54.0	21.8	1.75	0.857	58.2	0.578	0.770	145.9	480.0	0.325	1.215	-1.74	1.214	125.1	277.5	-2.4	0.731
45180.1	45332.0	0.731	266.1	2.2	1.84	1.074	52.9	0.518	0.618	139.6	441.2	0.236	0.999	-3.08	2.029	119.2	288.9	-4.2	1.313
11.69	36.77	500.0	+/+	12.3	1.3	112.3	0.0	1.493	1.050	2.5	-21.6	23.959	0.111	10.472	158.4	15.0	4.3	108.3	0.926
44970.0	45184.4	0.484	63.8	22.4	0.73	0.851	61.8	0.537	0.763	146.5	477.3	0.354	1.173	-2.73	1.210	122.3	285.6	-4.1	0.675
45184.4	45332.0	0.675	273.3	2.3	1.72	1.068	55.9	0.580	0.612	138.8	433.4	0.257	0.967	-3.32	2.025	115.5	291.7	-5.1	1.200
10.34	33.40	451.9	+/+	13.9	1.3	119.3	0.0	1.513	1.050	10.7	-27.4	22.450	0.130	9.073	152.6	14.2	6.3	106.5	0.941
44980.0	45188.6	0.433	72.9	22.4	-0.08	0.844	65.1	0.501	0.757	147.7	475.1	0.378	1.136	-3.46	1.206	119.9	293.4	-5.8	0.627
45188.6	45332.0	0.627	280.0	2.4	1.64	1.063	58.4	0.547	0.607	138.5	426.3	0.275	0.939	-3.54	2.022	112.3	294.2	-6.0	1.102
9.17	30.50	406.5	+/+	15.7	1.2	126.1	0.0	1.531	1.050	18.4	-31.4	21.183	0.151	7.967	148.5	13.9	8.7	105.0	0.955
44990.0	45192.7	0.387	81.2	21.7	-0.73	0.837	68.3	0.469	0.751	149.6	473.4	0.399	1.103	-3.96	1.203	117.9	300.6	-7.2	0.586
45192.7	45332.0	0.586	286.2	2.5	1.59	1.057	60.6	0.519	0.602	138.5	419.8	0.289	0.915	-3.73	2.019	109.6	296.5	-7.0	1.017
8.16	27.98	343.5	+/+	17.4	1.1	132.6	0.0	1.549	1.050	25.7	-34.0	20.116	0.173	7.087	145.8	14.0	11.1	104.0	0.971
45000.0	45196.6	0.346	88.3	20.6	-1.24	0.830	71.3	0.442	0.745	152.2	472.1	0.416	1.075	-4.25	1.199	116.2	307.4	-8.3	0.551
45196.6	45332.0	0.551	292.0	2.7	1.57	1.051	62.5	0.496	0.597	138.9	413.9	0.301	0.894	-3.90	2.015	107.2	298.6	-8.0	0.944
7.29	25.82	254.4	+/+	18.9	0.9	138.9	0.0	1.564	1.050	32.2	-35.5	19.217	0.195	6.380	144.3	14.2	13.4	103.5	0.992
45010.0	45200.2	0.308	94.1	19.2	-1.62	0.823	74.3	0.419	0.740	155.5	471.2	0.430	1.051	-4.36	1.196	114.7	313.7	-9.1	0.521
45200.2	45332.0	0.521	297.2	2.8	1.56	1.046	64.1	0.476	0.593	139.6	408.6	0.311	0.876	-4.07	2.012	105.2	300.6	-9.0	0.881
6.54	23.97	139.5	+/+	20.3	0.5	144.8	0.0	1.578	1.050	38.0	-36.1	18.462	0.218	5.812	143.7	14.3	15.5	103.5	1.018
45020.0	45203.6	0.274	98.0	17.7	-1.89	0.815	77.4	0.400	0.736	159.5	470.5	0.442	1.030	-4.32	1.193	113.5	319.4	-9.6	0.496
45203.6	45332.0	0.496	301.8	3.0	1.57	1.041	65.5	0.460	0.589	140.3	404.0	0.318	0.860	-4.21	2.010	103.5	302.3	-10.0	0.828
5.92	22.41	5.9	+/+	21.5	0.0	150.2	0.0	1.590	1.050	43.0	-35.8	17.835	0.241	5.357	144.0	14.4	17.4	103.9	1.049
45030.0	45206.5	0.244	99.7	16.3	-2.07	0.808	80.6	0.384	0.733	164.2	469.9	0.451	1.014	-4.16	1.191	112.6	324.4	-9.7	0.475
45206.5	45332.0	0.475	305.8	3.2	1.59	1.037	66.7	0.448	0.586	141.1	400.0	0.323	0.848	-4.35	2.007	102.1	303.8	-10.9	0.785
5.42	21.14		+/+	22.5	0.0	155.0	0.0	1.601	1.050	47.3	-34.9	17.241	0.263	5.118	144.9	14.3	19.2	104.4	1.081
45040.0	45208.9	0.221	98.3	15.4	-2.16	0.803	84.1	0.372	0.731	169.9	469.5	0.459	1.003	-3.89	1.189	111.8	328.5	-9.4	0.459
45208.9	45332.0	0.459	309.0	3.4	1.62	1.033	67.6	0.438	0.583	141.9	396.8	0.327	0.838	-4.46	2.005	101.0	304.9	-11.7	0.752
5.05	20.17		+/+	23.3	0.0	158.9	0.0	1.609	1.050	50.7	-33.4	16.769	0.281	4.954	146.4	14.0	20.6	105.1	1.112
45050.0	45210.6	0.208	93.4	15.0	-2.17	0.800	88.0	0.365	0.731	176.6	468.9	0.464	0.997	-3.56	1.189	111.4	331.5	-8.8	0.448
45210.6	45332.0	0.448	311.1	3.5	1.64	1.030	68.2	0.432	0.581	142.5	394.7	0.330	0.832	-4.54	2.004	100.3	305.8	-12.3	0.731
4.85	19.53		+/+	23.8	0.0	161.6	0.0	1.614	1.050	52.9	-31.4	16.451	0.295	4.850	148.5	13.4	21.6	105.9	1.136
45060.0	45211.2	0.211	85.2	15.3	-2.11	0.800	92.6	0.362	0.735	184.6	468.0	0.468	1.001A	-3.19	1.192	111.2	332.9	-8.0	0.444
45211.2	45332.0	0.445	311.8	3.6	1.65	1.029	68.4	0.430	0.580	142.7	394.0	0.331	0.830	-4.57	2.003	100.0	306.0	-12.5	0.723
4.90	19.32		+/+	24.0	0.0	162.6	0.0	1.616	1.050	53.6	-28.9	16.355	0.300	4.804	151.0	12.5	21.9	106.5	1.140
45070.0	45210.0	0.239	75.6	16.2	-1.96	0.810	98.2	0.369	0.746	194.6	466.3	0.471	1.021A	-2.83	1.201	111.5	332.0	-7.0	0.452
45210.0	45332.0	0.452	310.3	3.5	1.63	1.031	68.0	0.434	0.582	142.3	395.5	0.329	0.834	-4.51	2.004	100.5	305.5	-12.1	0.738
5.34	19.76		+/+	24.0	0.0	160.6	0.0	1.612	1.050	52.0	-26.0	16.629	0.290	4.809	154.0	11.1	21.2	106.7	1.104
45080.0	45205.6	0.308	66.7	17.3	-1.67	0.838	105.7	0.392	0.776	207.9	462.7	0.472	1.080A	-2.55	1.222	112.7	326.8	-6.0	0.481
45205.6	45332.0	0.481	304.6	3.1	1.59	1.038	66.3	0.451	0.587	140.9	401.2	0.322	0.852	-4.31	2.008	102.5	303.3	-10.6	0.798
6.55	21.51	333.5	+/+	23.9	1.3	153.6	0.0	1.598	1.050	47.0	-22.5	17.473	0.256	5.102	157.4	9.1	18.7	105.3	0.978

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL LEG	DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
								ARRIVAL DATE = 2445334.0											
44960.0	45182.3	0.604	54.0	21.1	1.47	0.856	53.8	0.632	0.769	147.0	484.6	0.284	1.255	-1.99	1.214	129.0	278.7	-2.3	0.808
45182.3	45334.0	0.808	267.9	1.0	1.05	1.069	48.6	0.574	0.613	142.7	450.9	0.200	1.026	-3.60	2.070	124.3	294.4	-4.2	1.471
13.31	41.45	927.3	+/+	11.3	2.2	115.8	0.0	1.503	1.000	4.7	-17.3	26.055	0.091	12.567	162.7	17.2	5.6	110.1	0.828
44970.0	45186.6	0.541	64.2	21.8	0.34	0.850	57.9	0.585	0.763	146.9	481.3	0.317	1.208	-3.09	1.210	125.7	287.3	-4.1	0.741
45186.6	45334.0	0.741	275.4	1.1	0.97	1.062	52.2	0.631	0.607	141.3	442.5	0.224	0.990	-3.75	2.066	120.0	297.4	-5.0	1.337
11.71	37.47	852.4	+/+	12.9	2.2	122.8	0.0	1.523	1.000	13.2	-23.7	24.242	0.108	10.744	156.2	16.1	5.1	107.9	0.852
44980.0	45190.9	0.483	73.9	21.8	-0.54	0.843	61.7	0.543	0.756	147.5	478.6	0.345	1.167	-3.86	1.206	122.8	295.3	-5.7	0.685
45190.9	45334.0	0.685	282.5	1.1	0.91	1.056	55.2	0.593	0.602	140.6	434.9	0.245	0.959	-3.88	2.063	116.4	300.1	-5.9	1.221
10.34	34.03	785.8	+/+	14.5	2.2	129.7	0.0	1.541	1.000	21.4	-28.2	22.714	0.126	9.311	151.7	15.5	6.2	106.1	0.872
44990.0	45195.1	0.432	82.7	21.1	-1.22	0.836	65.1	0.507	0.750	148.9	476.5	0.370	1.130	-4.36	1.202	120.4	302.9	-7.1	0.636
45195.1	45334.0	0.636	289.0	1.2	0.87	1.050	57.8	0.560	0.597	140.3	427.9	0.262	0.931	-3.99	2.059	113.2	302.5	-6.7	1.121
9.15	31.06	700.7	+/+	16.2	2.1	136.5	0.0	1.558	1.000	29.0	-31.0	21.425	0.146	8.174	148.8	15.3	8.1	104.9	0.894
45000.0	45199.1	0.386	90.5	20.0	-1.74	0.828	68.4	0.475	0.744	150.9	474.8	0.390	1.098	-4.64	1.198	118.3	310.1	-8.3	0.594
45199.1	45334.0	0.595	295.1	1.3	0.84	1.044	60.1	0.533	0.592	140.5	421.6	0.276	0.907	-4.09	2.056	110.5	304.8	-7.6	1.034
8.12	28.50	586.0	+/+	17.7	1.9	142.9	0.0	1.574	1.000	35.9	-32.5	20.337	0.168	7.266	147.2	15.2	10.1	104.3	0.921
45010.0	45202.8	0.343	97.0	18.5	-2.12	0.820	71.6	0.448	0.739	153.7	473.6	0.407	1.070	-4.73	1.195	116.6	316.7	-9.1	0.559
45202.8	45334.0	0.559	300.6	1.4	0.83	1.038	62.0	0.510	0.587	140.9	415.9	0.288	0.886	-4.18	2.053	108.2	306.8	-8.5	0.960
7.24	26.30	441.9	+/+	19.1	1.5	149.1	0.0	1.588	1.000	42.0	-33.0	19.420	0.190	6.537	146.6	15.3	12.2	104.2	0.952
45020.0	45206.4	0.305	102.0	16.8	-2.38	0.812	74.8	0.425	0.734	157.2	472.7	0.422	1.046	-4.65	1.191	115.2	322.8	-9.5	0.528
45206.4	45334.0	0.528	305.6	1.4	0.83	1.032	63.7	0.490	0.583	141.6	410.9	0.297	0.868	-4.26	2.050	106.2	308.6	-9.4	0.897
6.50	24.43	276.3	+/+	20.4	1.0	154.8	0.0	1.600	1.000	47.3	-32.6	18.649	0.212	5.950	147.0	15.3	14.1	104.6	0.988
45030.0	45209.6	0.271	105.0	15.3	-2.54	0.805	78.1	0.406	0.730	161.4	472.0	0.433	1.026	-4.45	1.188	114.0	328.2	-9.6	0.503
45209.6	45334.0	0.503	309.9	1.5	0.83	1.027	65.1	0.475	0.579	142.4	406.5	0.304	0.854	-4.34	2.047	104.5	310.2	-10.2	0.844
5.88	22.87	102.0	+/+	21.4	0.4	159.9	0.0	1.611	1.000	51.8	-31.5	18.013	0.234	5.484	148.1	15.1	15.8	105.4	1.027
45040.0	45212.3	0.243	105.6	14.1	-2.61	0.798	81.6	0.391	0.727	166.5	471.5	0.442	1.011	-4.14	1.186	113.0	332.9	-9.4	0.482
45212.3	45334.0	0.482	313.5	1.6	0.84	1.023	66.3	0.462	0.576	143.2	402.8	0.310	0.842	-4.40	2.044	103.2	311.5	-11.0	0.801
5.39	21.62		+/+	22.3	0.0	164.4	0.0	1.620	1.000	55.4	-29.8	17.465	0.255	5.181	149.9	14.8	17.3	106.4	1.065
45050.0	45214.4	0.222	102.8	13.5	-2.61	0.793	85.4	0.380	0.726	172.5	471.0	0.450	1.002	-3.75	1.185	112.3	336.6	-8.8	0.467
45214.4	45334.0	0.467	316.2	1.7	0.85	1.019	67.1	0.454	0.573	143.9	400.1	0.313	0.833	-4.46	2.043	102.2	312.6	-11.6	0.771
5.06	20.71		•/+	22.9	0.0	167.8	0.0	1.626	1.000	58.3	-27.5	17.009	0.272	5.036	152.2	14.2	18.5	107.3	1.096
45060.0	45215.7	0.214	96.6	13.8	-2.55	0.791	89.8	0.374	0.727	179.6	470.3	0.455	0.999	-3.32	1.187	112.0	339.1	-8.0	0.458
45215.7	45334.0	0.458	317.8	1.8	0.86	1.017	67.7	0.448	0.572	144.4	398.5	0.315	0.828	-4.49	2.041	101.7	313.2	-12.0	0.753
4.94	20.19		+/+	23.3	0.0	169.9	0.0	1.630	1.000	59.9	-24.8	16.751	0.282	4.943	154.9	13.4	19.2	108.1	1.113
45070.0	45215.7	0.225	87.7	14.9	-2.43	0.795	94.9	0.375	0.733	188.3	469.1	0.458	1.008A	-2.88	1.192	112.0	339.7	-7.0	0.458
45215.7	45334.0	0.458	317.8	1.8	0.86	1.017	67.6	0.448	0.572	144.4	398.5	0.315	0.828	-4.49	2.041	101.7	313.2	-12.0	0.753
5.12	20.19		+/+	23.6	0.0	169.9	0.0	1.630	1.000	59.8	-21.8	16.785	0.282	4.900	158.0	12.3	19.2	108.6	1.100
45080.0	45213.6	0.268	78.3	16.3	-2.24	0.811	101.3	0.386	0.750	199.2	466.9	0.460	1.040A	-2.47	1.204	112.6	337.6	-5.8	0.473
45213.6	45334.0	0.473	315.2	1.7	0.85	1.021	66.8	0.457	0.574	143.6	401.2	0.312	0.836	-4.43	2.043	102.6	312.2	-11.4	0.783
5.82	21.06	85.4	+/+	23.6	0.3	166.5	0.0	1.624	1.000	57.2	-18.6	17.278	0.265	4.966	161.3	10.6	18.0	108.2	1.031
								ARRIVAL DATE = 2445336.0											
45000.0	45201.5	0.432	92.1	19.4	-2.34	0.827	65.2	0.514	0.743	150.1	477.9	0.361	1.124	-5.14	1.198	120.9	312.5	-8.2	0.646
45201.5	45336.0	0.646	298.0	0.0	0.0	1.036	57.2	0.575	0.586	142.3	430.3	0.249	0.922	-4.33	2.094	114.4	311.3	-7.3	1.137
9.15	31.54	975.8	+/+	16.6	2.9	146.9	0.0	1.583	0.949	39.2	-29.6	21.690	0.142	8.402	150.0	16.5	7.7	105.3	0.842
45010.0	45205.4	0.385	99.4	17.8	-2.70	0.818	68.6	0.483	0.737	152.3	476.3	0.381	1.092	-5.19	1.194	118.8	319.5	-9.0	0.604
45205.4	45336.0	0.604	303.9	0.0	0.0	1.030	59.5	0.547	0.581	142.5	424.1	0.263	0.899	-4.33	2.090	111.7	313.5	-8.0	1.049
8.11	28.91	807.7	+/+	18.0	2.6	153.2	0.0	1.597	0.949	45.7	-30.0	20.573	0.163	7.458	149.4	16.4	9.2	105.1	0.878
45020.0	45209.1	0.342	105.3	16.0	-2.94	0.810	72.0	0.455	0.732	155.2	475.1	0.398	1.065	-5.07	1.190	117.1	326.0	-9.5	0.567
45209.1	45336.0	0.567	309.1	0.0	0.0	1.023	61.5	0.524	0.576	143.0	418.6	0.274	0.878	-4.33	2.087	109.4	315.4	-8.8	0.973
7.22	26.68	615.2	+/+	19.3	2.1	159.2	0.0	1.609	0.949	51.4	-29.5	19.630	0.184	6.701	149.9	16.2	10.9	105.4	0.917
45030.0	45212.5	0.303	109.5	14.3	-3.06	0.802	75.4	0.433	0.727	158.9	474.2	0.412	1.042	-4.80	1.186	115.6	331.8	-9.6	0.536
45212.5	45336.0	0.536	313.8	0.0	0.0	1.017	63.2	0.505	0.572	143.7	413.8	0.283	0.861	-4.33	2.084	107.4	317.1	-9.5	0.909
6.46	24.79	412.2	+/+	20.4	1.5	164.7	0.0	1.620	0.949	56.2	-28.2	18.841	0.206	6.095	151.2	16.0	12.5	106.2	0.960
45040.0	45215.5	0.270	111.6	12.9	-3.10	0.794	78.9	0.414	0.723	163.4	473.6	0.424	1.023	-4.44	1.184	114.5	337.0	-9.4	0.510
45215.5	45336.0	0.510	317.8	0.0	0.0	1.012	64.7	0.489	0.568	144.5	409.7	0.290	0.847	-4.33	2.081	105.8	318.6	-10.2	0.856
5.85	23.24	217.0	+/+	21.3	0.8	169.6	0.0	1.629	0.949	60.2	-26.2	18.196	0.227	5.617	153.2	15.6	14.0	107.3	1.002
45050.0	45218.0	0.242	111.0	12.0	-3.07	0.788	82.7	0.399	0.721	168.7	473.1	0.433	1.009	-3.99	1.182	113.5	341.4	-8.9	0.490
45218.0	45336.0	0.490	321.0	0.0	0.0	1.008	65.9	0.478	0.565	145.3	406.5	0.295	0.836	-4.33	2.079	104.6	319.8	-10.7	0.816
5.39	22.04	51.0	+/+	22.1	0.2	173.6	0.0	1.636	0.949	63.2	-23.7	17.694	0.247	5.257	155.8	15.1	15.3	108.6	1.038
45060.0	45219.8	0.225	107.0	12.0	-2.98	0.784	86.9	0.390	0.721	175.1	472.5	0.440	1.001	-3.50	1.182	112.9	344.7	-8.0	0.476
45219.8	45336.0	0.476	323.3	0.0	0.0	1.004	66.7	0.470	0.563	145.9	404.1	0.299	0.828	-4.33	2.078	103.7	320.7	-11.2	0.787
5.11	21.20		+/+	22.8	0.0	176.6	0.0	1.642	0.949	65.5	-20.8	17.312	0.262	5.065	158.8	14.4	16.2	109.7	1.063
45070.0	45220.7	0.222	99.7	13.0	-2.86	0.784	91.7	0.385	0.724	182.7	471.7	0.445	1.003A	-2.99	1.184	112.7	346.6	-7.0	0.469
45220.7	45336.0	0.469	324.4	0.0	0.0	1.003	67.1	0.466	0.562	146.2	403.0	0.300	0.824	-4.33	2.077	103.3	321.1	-11.4	0.774
5.08	20.82		+/+	23.2	0.0	178.0	0.0	1.644	0.949	66.5	-17.6	17.148	0.269	4.967	162.0	13.4	16.6	110.4	1.066
45080.0	45220.0	0.245	90.4	14.8	-2.69	0.792	97.5	0.389	0.733	192.0	470.1	0.448	1.019A	-2.49	1.192	112.9	346.3	-5.8	0.474
45220.0	45336.0	0.474	323.5	0.0	0.0	1.004	66.8	0.469	0.563	146.0	403.9	0.299	0.827	-4.33	2.077	103.6	320.8	-11.2	0.784
5.43	21.11	88.2	+/+	23.5	0.4	177.0	0.0	1.642	0.949	65.8	-14.4	17.314	0.263	4.991	165.3	12.1	16.3	110.4	1.030
45090.0	45216.9	0.304	81.7	16.8	-2.48	0.816	104.8	0.408	0.758	203.9	467.2	0.449	1.067A	-2.05	1.210	113.9	342.8	-4.5	0.499
45216.9	45336.0	0.499	319.6	0.0	0.0	1.010	65.4	0.483	0.567	144.9	407.9	0.293	0.840	-4.33	2.080	105.1	319.3	-10.5	0.834
6.48	22.56	605.3	+/+	23.6	2.3	171.8	0.0	1.633	0.949	62.8	-11.2	17.917	0.238	5.415	168.5	10.1	14.7	108.6	0.924

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
								ARRIVAL DATE = 2445338.0											
45030.0	45215.3	0.341	113.2	13.5	-3.65	0.799	72.4	0.463	0.725	156.8	476.6	0.389	1.060	-5.24	1.185	117.6	335.2	-9.6	0.575
45215.3	45338.0	0.575	317.5	-1.3	-0.85	1.007	61.0	0.539	0.565	145.1	422.0	0.261	0.870	-4.35	2.117	110.8	324.5	-8.8	0.982
7.20	26.94	797.5	+/+	19.4	2.7	169.3	0.0	1.629	0.896	60.4	-25.1	19.838	0.179	6.865	154.0	17.0	9.7	107.0	0.882
45040.0	45218.5	0.302	116.6	11.7	-3.64	0.790	76.0	0.440	0.720	160.7	475.8	0.403	1.038	-4.80	1.181	116.1	340.9	-9.4	0.544
45218.5	45338.0	0.544	321.9	-1.4	-0.84	1.001	62.8	0.520	0.561	145.8	417.5	0.269	0.853	-4.27	2.114	108.9	326.1	-9.3	0.917
6.44	25.04	577.6	+/+	20.5	2.0	174.5	0.0	1.638	0.896	64.7	-22.9	19.031	0.200	6.238	156.2	16.6	11.0	108.2	0.926
45050.0	45221.4	0.269	117.8	10.5	-3.56	0.783	79.8	0.422	0.717	165.4	475.2	0.415	1.020	-4.29	1.179	115.0	345.8	-8.9	0.518
45221.4	45338.0	0.518	325.5	-1.5	-0.85	0.996	54.3	0.505	0.558	146.6	413.7	0.276	0.839	-4.21	2.111	107.4	327.5	-9.8	0.866
5.83	23.52	385.8	+/+	21.5	1.4	179.1	0.0	1.646	0.896	68.3	-20.2	18.381	0.221	5.752	159.0	16.0	12.1	109.5	0.966
45060.0	45223.7	0.243	116.1	10.1	-3.44	0.777	83.9	0.408	0.715	171.0	474.6	0.423	1.008	-3.73	1.177	114.1	349.8	-8.1	0.498
45223.7	45338.0	0.498	328.4	-1.5	-0.85	0.991	65.5	0.493	0.555	147.3	410.7	0.281	0.829	-4.15	2.109	106.2	328.6	-10.2	0.827
5.40	22.36	246.8	+/+	22.3	1.0	182.8	0.0	1.652	0.896	71.0	-17.0	17.892	0.239	5.397	162.2	15.3	13.1	110.8	0.996
45070.0	45225.1	0.229	118.8	10.8	-3.27	0.774	88.5	0.400	0.716	177.8	474.0	0.430	1.002	-3.15	1.178	113.6	352.6	-7.0	0.485
45225.1	45338.0	0.486	330.1	-1.6	-0.85	0.988	66.3	0.486	0.553	147.9	408.9	0.284	0.823	-4.11	2.108	105.5	329.3	-10.5	0.802
5.18	21.64	189.7	+/+	23.0	0.8	185.2	0.0	1.655	0.896	72.8	-13.6	17.585	0.251	5.180	165.6	14.5	13.8	111.8	1.008
45080.0	45225.5	0.235	102.6	12.6	-3.09	0.777	93.9	0.398	0.721	185.9	472.9	0.434	1.008A	-2.58	1.182	113.4	353.8	-5.8	0.482
45225.5	45338.0	0.483	330.6	-1.6	-0.86	0.988	66.4	0.485	0.553	148.0	408.4	0.285	0.821	-4.11	2.107	105.3	329.5	-10.5	0.796
5.27	21.47	262.3	+/+	23.5	1.0	185.8	0.0	1.656	0.896	73.4	-10.3	17.512	0.254	5.129	169.0	13.4	13.9	112.1	0.993
45090.0	45224.1	0.270	93.6	15.0	-2.90	0.791	100.4	0.406	0.735	195.9	471.0	0.437	1.034A	-2.04	1.193	113.9	352.6	-4.5	0.494
45224.1	45338.0	0.494	328.9	-1.6	-0.85	0.990	65.9	0.491	0.555	147.5	410.1	0.282	0.827	-4.14	2.108	106.0	328.8	-10.3	0.819
5.85	22.13	564.5	+/+	23.8	2.2	183.6	0.0	1.653	0.896	72.3	-7.1	17.792	0.243	5.327	172.2	11.9	13.3	111.2	0.932
								ARRIVAL DATE = 2445340.0											
45050.0	45224.5	0.301	123.4	9.3	-4.10	0.779	76.7	0.448	0.714	162.5	477.4	0.394	1.034	-4.65	1.176	116.6	349.7	-8.9	0.550
45224.5	45340.0	0.551	329.7	-2.7	-1.71	0.984	62.5	0.535	0.550	147.9	421.8	0.256	0.845	-4.10	2.136	110.6	335.6	-8.9	0.922
6.42	25.17	801.2	+/+	20.8	2.8	184.2	0.0	1.654	0.844	73.0	-17.1	19.210	0.195	6.375	161.7	17.0	9.5	110.3	0.884
45060.0	45227.2	0.268	123.6	8.4	-3.92	0.772	80.9	0.430	0.711	167.5	476.8	0.405	1.017	-4.01	1.174	115.5	354.4	-8.1	0.525
45227.2	45340.0	0.525	333.0	-2.9	-1.71	0.978	64.1	0.520	0.547	148.7	418.3	0.263	0.832	-3.97	2.133	109.2	336.9	-9.2	0.871
5.82	23.68	638.1	+/+	21.9	2.3	188.5	0.0	1.660	0.844	76.2	-13.8	18.562	0.215	5.886	165.0	16.3	10.3	111.6	0.916
45070.0	45229.1	0.245	120.6	8.6	-3.70	0.767	85.4	0.418	0.710	173.5	476.1	0.414	1.007	-3.36	1.173	114.7	357.9	-7.1	0.506
45229.1	45340.0	0.506	335.4	-3.0	-1.71	0.974	65.2	0.510	0.545	149.4	415.8	0.267	0.823	-3.88	2.131	108.1	337.8	-9.4	0.836
5.43	22.62	548.7	+/+	22.9	2.1	191.7	0.0	1.665	0.844	78.6	-10.2	18.098	0.231	5.545	168.4	15.5	10.9	112.7	0.935
45080.0	45230.2	0.236	114.2	10.1	-3.47	0.766	90.5	0.411	0.712	180.6	475.3	0.420	1.005A	-2.71	1.175	114.2	0.2	-5.9	0.496
45230.2	45340.0	0.496	336.6	-3.1	-1.71	0.972	65.8	0.504	0.544	149.8	414.4	0.270	0.818	-3.82	2.130	107.6	338.3	-9.5	0.816
5.29	22.06	565.5	+/+	23.7	2.2	193.5	0.0	1.667	0.844	80.0	-6.7	17.849	0.240	5.367	171.8	14.5	11.3	113.3	0.932
45090.0	45230.1	0.251	105.6	12.6	-3.25	0.773	96.4	0.412	0.720	189.3	474.0	0.424	1.017A	-2.10	1.181	114.3	0.7	-4.5	0.498
45230.1	45340.0	0.498	336.4	-3.0	-1.71	0.972	65.7	0.505	0.544	149.7	414.6	0.269	0.819	-3.83	2.130	107.7	338.3	-9.5	0.819
5.54	22.14	746.1	+/+	24.2	2.9	193.3	0.0	1.667	0.844	80.2	-3.5	17.888	0.239	5.394	174.7	13.3	11.2	113.0	0.899

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
								ARRIVAL DATE = 2445606.0											
45500.0	45568.4	0.231	166.0	-6.8	-3.56	0.760	90.4	0.413	0.719	180.6	243.9	0.422D	1.016A	-0.41	1.164	65.6	27.6	-0.9	0.491
45568.4	45606.0	0.491	52.8	4.5	2.57	0.951	114.1	0.513	0.543	208.5	304.7	0.264D	0.821A	-3.78	2.151	71.9	158.3	-12.9	0.601
5.21	15.74	999.3	-/-	25.8	3.9	14.9	0.0	0.289	0.876	308.6	-12.3	17.718	0.246	5.273	12.4	167.3	165.3	66.9	0.856
45510.0	45569.4	0.251	162.6	-5.3	-3.90	0.752	94.9	0.432	0.714	186.6	242.0	0.406D	1.022A	-1.12	1.160	64.5	30.3	-2.3	0.513
45569.4	45606.0	0.513	52.2	4.4	2.56	0.966	115.6	0.520	0.551	210.6	305.2	0.264D	0.838A	-3.70	2.157	71.9	157.8	-12.6	0.605
5.52	15.84	687.7	-/-	22.9	2.6	16.5	0.0	0.288	0.876	310.2	-17.0	18.260	0.225	5.663	17.0	166.1	165.3	67.4	0.908
45520.0	45570.5	0.287	158.5	-3.3	-4.39	0.756	100.8	0.451	0.717	193.7	241.4	0.393D	1.040A	-1.96	1.163	63.2	32.4	-3.8	0.540
45570.5	45606.0	0.539	51.6	4.1	2.56	0.984	117.4	0.529	0.562	213.0	305.8	0.265D	0.860A	-3.62	2.165	71.8	157.1	-12.3	0.609
6.15	15.96	575.9	-/-	20.7	2.1	18.3	0.0	0.287	0.876	310.9	-22.6	18.927	0.204	6.159	22.6	165.4	165.2	69.2	0.927
45530.0	45571.9	0.347	154.3	-1.0	-5.07	0.782	108.0	0.475	0.738	202.7	243.1	0.388D	1.088A	-2.99	1.180	61.7	33.7	-5.4	0.575
45571.9	45606.0	0.575	50.9	3.9	2.56	1.009	119.5	0.541	0.578	216.0	306.6	0.265D	0.892A	-3.53	2.177	71.8	156.1	-12.0	0.614
7.33	16.12	825.8	-/-	19.5	2.8	20.5	0.0	0.287	0.876	310.3	-28.6	19.824	0.179	6.854	28.6	165.7	165.0	72.6	0.877
								ARRIVAL DATE = 2445608.0											
45490.0	45567.6	0.221	168.0	-7.6	-3.32	0.774	86.9	0.395	0.729	175.2	246.9	0.441D	1.017	0.21	1.173	66.7	24.8	0.5	0.470
45567.6	45608.0	0.470	50.1	6.6	3.47	0.959	112.9	0.486	0.553	210.3	320.4	0.284D	0.822A	-4.05	2.167	77.3	162.4	-17.2	0.505
5.05	12.93	600.3	-/-	25.9	2.5	13.7	0.0	0.290	0.932	307.0	-13.8	17.200	0.268	4.912	14.2	168.9	157.0	67.4	0.927
45500.0	45568.5	0.230	166.0	-6.9	-3.56	0.761	90.4	0.412	0.720	180.6	244.2	0.423D	1.016A	-0.41	1.165	65.7	27.7	-0.9	0.489
45568.5	45608.0	0.489	49.5	6.3	3.44	0.982	114.2	0.492	0.561	212.3	320.8	0.285D	0.837A	-3.95	2.173	77.3	161.8	-16.8	0.506
5.19	12.96	237.3	-/-	22.9	0.9	15.2	0.0	0.289	0.932	309.0	-18.4	17.670	0.248	5.240	18.6	167.4	156.9	67.4	0.998
45510.0	45569.5	0.249	162.6	-5.4	-3.90	0.754	94.9	0.430	0.714	186.6	242.3	0.407D	1.022A	-1.12	1.161	64.6	30.3	-2.3	0.511
45569.5	45608.0	0.511	49.1	6.0	3.41	0.997	115.7	0.500	0.570	214.4	321.3	0.285D	0.855A	-3.85	2.179	77.3	161.0	-16.4	0.507
5.50	12.99		-/-	20.4	0.0	16.7	0.0	0.288	0.932	310.5	-24.0	18.206	0.227	5.635	24.1	166.2	156.6	68.4	1.052
45520.0	45570.7	0.285	158.4	-3.3	-4.38	0.758	100.7	0.450	0.718	193.7	241.7	0.395D	1.040A	-1.95	1.164	63.3	32.5	-3.8	0.537
45570.7	45608.0	0.537	48.6	5.7	3.38	1.015	117.3	0.510	0.582	216.8	322.0	0.286D	0.879A	-3.74	2.188	77.4	160.0	-15.9	0.508
6.13	13.03		-/-	18.7	0.0	18.5	0.0	0.287	0.932	311.1	-30.5	18.851	0.205	6.165	30.6	165.5	156.2	70.7	1.059
45530.0	45572.0	0.346	154.2	-1.0	-5.05	0.783	108.0	0.473	0.738	202.8	243.3	0.389D	1.087A	-2.98	1.180	61.8	33.8	-5.4	0.572
45572.0	45608.0	0.572	48.1	5.3	3.35	1.040	119.3	0.523	0.600	219.9	323.0	0.286D	0.914A	-3.61	2.199	77.5	158.6	-15.4	0.510
7.30	13.09	296.5	-/-	17.9	1.0	20.6	0.0	0.287	0.932	310.3	-37.0	19.763	0.181	6.806	37.0	165.8	155.5	74.4	0.982
								ARRIVAL DATE = 2445610.0											
45470.0	45565.7	0.218	167.2	-6.9	-3.09	0.807	82.2	0.364	0.754	165.8	253.7	0.479D	1.029	1.30	1.192	68.7	18.3	3.3	0.435
45565.7	45610.0	0.435	48.6	9.8	4.68	0.969	110.5	0.459	0.553	209.3	334.9	0.299D	0.807A	-4.80	2.163	82.2	166.3	-24.6	0.430
5.01	10.78	958.3	-/-	30.7	4.2	10.7	0.0	0.293	0.989	302.7	-12.5	16.379	0.312	4.361	14.0	171.7	145.9	68.6	0.866
45480.0	45566.7	0.218	168.4	-7.5	-3.17	0.790	84.2	0.379	0.741	170.4	250.2	0.460D	1.022	0.77	1.182	67.8	21.6	1.9	0.452
45566.7	45610.0	0.452	48.1	9.3	4.60	0.979	111.8	0.465	0.559	211.2	335.3	0.299D	0.819A	-4.66	2.167	82.2	165.5	-24.0	0.429
5.00	10.75	546.3	-/-	27.3	2.3	12.2	0.0	0.291	0.989	305.2	-16.0	16.775	0.290	4.624	16.9	170.4	145.9	67.9	0.938
45490.0	45567.6	0.221	168.0	-7.6	-3.32	0.774	86.9	0.395	0.729	175.2	246.9	0.441D	1.017	0.21	1.173	66.7	24.8	0.5	0.470
45567.6	45610.0	0.470	47.6	8.8	4.52	0.991	113.0	0.471	0.566	213.1	335.7	0.300D	0.833A	-4.52	2.172	82.3	164.6	-23.3	0.428
5.05	10.72	170.4	-/-	24.2	0.7	13.7	0.0	0.290	0.989	307.5	-20.2	17.201	0.268	4.913	20.8	168.9	145.7	67.7	1.013
45500.0	45568.6	0.230	166.0	-6.9	-3.56	0.761	90.4	0.412	0.720	180.6	244.2	0.423D	1.016A	-0.41	1.165	65.7	27.7	-0.9	0.489
45568.6	45610.0	0.489	47.2	8.3	4.45	1.003	114.3	0.478	0.574	215.1	336.2	0.300D	0.849A	-4.38	2.178	82.4	163.7	-22.7	0.427
5.19	10.69		-/-	21.5	0.0	15.2	0.0	0.289	0.989	309.2	-25.5	17.586	0.248	5.366	25.9	167.4	145.4	68.4	1.082
45510.0	45569.6	0.249	162.6	-5.4	-3.90	0.754	94.9	0.430	0.715	186.6	242.3	0.407D	1.022A	-1.12	1.161	64.6	30.3	-2.3	0.511
45569.6	45610.0	0.511	46.8	7.9	4.38	1.018	115.6	0.486	0.584	217.2	336.8	0.300D	0.868A	-4.24	2.185	82.5	162.5	-22.1	0.426
5.50	10.66		-/-	19.3	0.0	16.8	0.0	0.288	0.989	310.3	-31.9	18.020	0.227	5.960	32.0	166.2	144.9	70.2	1.126
45520.0	45570.7	0.285	158.4	-3.3	-4.38	0.758	100.7	0.449	0.718	193.7	241.7	0.395D	1.040A	-1.95	1.164	63.3	32.5	-3.8	0.537
45570.7	45610.0	0.537	46.5	7.4	4.30	1.036	117.2	0.497	0.597	219.7	337.5	0.301D	0.894A	-4.08	2.193	82.6	161.1	-21.3	0.425
6.13	10.64		-/-	17.9	0.0	18.5	0.0	0.287	0.989	310.9	-38.8	18.711	0.205	6.429	38.8	165.6	144.2	72.7	1.115
45530.0	45572.0	0.346	154.2	-1.0	-5.05	0.783	107.9	0.472	0.739	202.8	243.4	0.390D	1.087A	-2.98	1.181	61.8	33.8	-5.4	0.572
45572.0	45610.0	0.572	46.2	6.9	4.22	1.060	119.1	0.511	0.616	222.8	338.5	0.301D	0.931A	-3.90	2.205	82.8	159.1	-20.5	0.425
7.29	10.64	148.3	-/-	17.4	0.5	20.7	0.0	0.287	0.989	310.3	-44.9	19.748	0.181	6.794	44.9	165.8	143.0	76.2	1.015
								ARRIVAL DATE = 2445612.0											
45470.0	45565.5	0.219	167.2	-6.8	-3.08	0.807	82.1	0.366	0.753	165.9	253.5	0.478D	1.029	1.30	1.191	68.6	18.2	3.3	0.437
45565.5	45612.0	0.437	47.0	13.3	6.27	0.982	110.5	0.447	0.561	210.9	349.3	0.310D	0.812A	-5.90	2.152	86.7	167.3	-35.0	0.385
5.03	9.49	867.6	-/-	30.1	3.8	10.4	0.0	0.293	1.044	303.4	-19.6	16.425	0.310	4.391	21.3	171.6	131.7	68.4	0.881
45480.0	45566.5	0.219	168.4	-7.5	-3.17	0.790	84.2	0.380	0.740	170.4	249.9	0.459D	1.022	0.77	1.181	67.7	21.5	1.9	0.454
45566.5	45612.0	0.454	46.5	12.5	6.09	0.992	111.7	0.453	0.568	212.9	349.7	0.310D	0.825A	-5.65	2.157	86.8	166.1	-33.8	0.381
5.02	9.37	486.4	-/-	26.9	2.1	12.0	0.0	0.292	1.044	305.9	-23.3	16.816	0.288	4.651	24.5	170.3	131.6	68.1	0.949
45490.0	45567.5	0.222	168.0	-7.5	-3.32	0.774	86.9	0.396	0.728	175.2	246.7	0.440D	1.017	0.21	1.172	66.7	24.7	0.5	0.471
45567.5	45612.0	0.471	46.1	11.7	5.93	1.004	112.9	0.460	0.575	214.8	350.2	0.310D	0.839A	-5.42	2.162	86.9	164.8	-32.7	0.377
5.06	9.27	151.8	-/-	24.0	0.6	13.5	0.0	0.290	1.044	308.2	-27.9	17.236	0.267	4.937	28.7	168.8	131.3	68.3	1.016
45500.0	45568.5	0.231	166.0	-6.8	-3.56	0.760	90.4	0.413	0.719	180.6	244.0	0.422D	1.016A	-0.41	1.165	65.6	27.7	-0.9	0.490
45568.5	45612.0	0.490	45.7	11.0	5.77	1.016	114.2	0.468	0.583	216.9	350.7	0.310D	0.856A	-5.20	2.168	87.0	163.4	-31.7	0.374
5.20	9.17		-/-	21.5	0.0	15.0	0.0	0.289	1.044	310.0	-33.4	17.637	0.246	5.357	33.9	167.3	130.9	69.4	1.074
45510.0	45569.5	0.250	162.6	-5.4	-3.90	0.753	94.9	0.431	0.714	186.6	242.2	0.407D	1.022A	-1.12	1.160	64.5	30.3	-2.3	0.512
45569.5	45612.0	0.512	45.4	10.3	5.62	1.031	115.5	0.477	0.593	219.1	351.2	0.311D	0.876A	-4.98	2.175	87.2	161.7	-30.6	0.371
5.51	9.09		-/-	19.6	0.0	16.6	0.0	0.288	1.044	311.2	-39.8	18.101	0.226	5.874	40.1	166.2	130.3	71.4	1.102
45520.0	45570.6	0.286	158.4	-3.3	-4.38	0.757	100.7	0.450	0.718	193.7	241.6	0.395D	1.040A	-1.96	1.164	63.3	32.4	-3.8	0.538
45570.6	45612.0	0.538	45.2	9.5	5.47	1.048	117.3	0.488	0.607	221.6	351.9	0.311D	0.903A	-4.74	2.183	87.4	159.7	-29.3	0.368
6.13	9.01		-/-	18.4	0.0	18.5	0.0	0.287	1.044	311.8	-46.4	18.819	0.205	6.255	46.5	165.5	129.3	74.1	1.076

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	FCCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
45530.0	45572.0	0.346	154.2	-1.0	-5.05	0.783	107.9	0.472	0.739	202.8	243.4	0.390D	1.087A	-2.98	1.180	61.8	33.8	-5.4	0.572
45572.0	45612.0	0.572	45.0	8.7	5.30	1.072	118.9	0.503	0.626	224.7	352.8	0.311D	0.941A	-4.48	2.195	87.6	156.9	-27.9	0.366
7.29	8.95	338.7	-/-	18.1	1.1	20.7	0.0	0.287	1.044	310.6	-51.7	19.754	0.181	6.799	51.7	165.8	127.7	77.8	0.973
								ARRIVAL DATE = 2445614.0											
45490.0	45567.2	0.224	158.1	-7.4	-3.32	0.772	86.8	0.399	0.727	175.2	246.2	0.437D	1.017	0.21	1.171	66.5	24.5	0.5	0.475
45567.2	45614.0	0.475	45.5	16.1	8.15	1.009	112.5	0.451	0.578	215.5	363.4	0.317	0.839A	-7.21	2.138	91.1	162.7	-46.4	0.370
5.09	9.08	731.1	-/-	26.0	3.0	13.0	0.0	0.291	1.098	309.3	-37.1	17.328	0.262	5.000	38.1	168.5	114.8	69.2	0.903
45500.0	45568.2	0.232	166.1	-6.8	-3.56	0.759	90.4	0.415	0.718	180.5	243.7	0.420D	1.016A	-0.41	1.163	65.5	27.5	-0.9	0.493
45568.2	45614.0	0.483	45.2	14.9	7.79	1.022	113.8	0.460	0.587	217.6	363.9	0.317	0.857A	-6.78	2.144	91.2	160.5	-44.5	0.361
5.23	8.82	477.3	-/-	23.6	1.9	14.6	0.0	0.289	1.098	311.3	-42.0	17.775	0.243	5.314	42.7	167.1	114.4	70.5	0.949
45510.0	45569.3	0.251	162.7	-5.3	-3.90	0.752	94.9	0.433	0.713	186.6	241.9	0.405D	1.022A	-1.12	1.160	64.4	30.2	-2.3	0.514
45569.3	45614.0	0.514	44.9	13.7	7.46	1.036	115.2	0.469	0.598	219.9	364.4	0.317	0.878A	-6.38	2.151	91.4	158.1	-42.5	0.354
5.54	8.60	369.3	-/-	21.6	1.4	16.4	0.0	0.288	1.098	312.7	-47.6	18.292	0.224	5.687	48.0	166.0	113.6	72.6	0.970
45520.0	45570.5	0.287	158.5	-3.3	-4.39	0.756	100.8	0.451	0.717	193.7	241.4	0.393D	1.040A	-1.96	1.163	63.2	32.4	-3.8	0.540
45570.5	45614.0	0.539	44.7	12.5	7.13	1.054	116.7	0.481	0.611	222.5	365.1	0.317	0.905A	-5.97	2.160	91.6	155.3	-40.3	0.347
6.15	8.41	473.0	-/-	20.4	1.7	18.3	0.0	0.287	1.098	312.9	-53.1	18.928	0.203	6.160	53.3	165.4	112.5	75.5	0.947
45530.0	45572.0	0.346	154.3	-1.0	-5.06	0.783	108.0	0.473	0.738	202.7	243.3	0.389D	1.087A	-2.98	1.180	61.8	33.8	-5.4	0.573
45572.0	45614.0	0.573	44.6	11.2	6.78	1.078	118.6	0.498	0.631	225.6	365.9	0.317	0.944A	-5.52	2.171	92.0	151.6	-37.7	0.341
7.30	8.26	891.8	-/-	19.9	3.0	20.6	0.0	0.287	1.098	310.9	-57.2	19.779	0.180	6.818	57.2	165.8	110.6	79.2	0.866
								ARRIVAL DATE = 2445624.0											
45500.0	45568.9	0.228	165.9	-6.9	-3.55	0.763	90.4	0.409	0.721	180.6	244.6	0.426D	1.016A	-0.41	1.166	65.9	27.9	-0.9	0.486
45568.8	45624.0	0.486	47.7	-18.3	-9.37	1.014	112.8	0.451	0.582	216.4	414.4	0.320	0.845A	12.15	1.931	106.2	124.9	57.0	0.465
5.16	11.80	961.5	-/+	26.0	3.8	15.6	0.0	0.289	1.305	313.7	41.7	17.593	0.251	5.186	43.0	167.6	64.4	69.4	0.862
45510.0	45569.7	0.248	162.5	-5.4	-3.89	0.755	94.9	0.427	0.716	186.6	242.6	0.410D	1.022A	-1.11	1.162	64.7	30.5	-2.3	0.508
45569.7	45624.0	0.508	47.9	-19.0	-10.19	1.024	113.9	0.459	0.589	218.0	414.5	0.319	0.859A	13.01	1.936	106.4	123.0	58.2	0.492
5.48	12.56	860.4	-/+	23.9	3.3	17.1	0.0	0.288	1.305	317.3	44.0	18.137	0.230	5.574	45.7	166.4	64.7	68.8	0.878
45520.0	45570.8	0.284	158.3	-3.3	-4.37	0.759	100.7	0.448	0.719	193.8	242.0	0.397D	1.040A	-1.95	1.165	63.4	32.5	-3.8	0.535
45570.8	45624.0	0.535	48.4	-20.1	-11.31	1.036	115.1	0.468	0.597	219.8	414.7	0.318	0.877A	14.17	1.942	106.7	120.5	59.8	0.527
6.10	13.57	974.1	-/+	22.5	3.5	18.7	0.0	0.287	1.305	320.4	46.0	18.811	0.207	6.072	48.0	165.7	65.1	68.6	0.856
								ARRIVAL DATE = 2445626.0											
45470.0	45567.0	0.212	167.0	-7.5	-3.13	0.813	82.4	0.354	0.759	165.7	255.6	0.490D	1.028	1.30	1.196	69.4	19.4	3.4	0.423
45567.0	45626.0	0.423	48.2	-10.7	-4.83	0.990	110.1	0.436	0.566	211.8	421.2	0.319	0.813A	7.84	1.874	107.5	131.5	41.0	0.372
4.91	9.12	931.4	-/+	32.0	4.2	12.7	0.0	0.291	1.334	303.2	26.6	16.084	0.331	4.170	26.7	172.5	52.1	71.7	0.871
45480.0	45567.9	0.211	168.1	-8.1	-3.20	0.797	84.4	0.368	0.747	170.3	252.1	0.472D	1.021	0.77	1.186	68.5	22.7	1.9	0.439
45567.9	45626.0	0.439	48.2	-10.8	-5.07	0.998	111.1	0.442	0.571	213.4	421.3	0.319	0.823A	8.11	1.878	107.7	130.7	41.3	0.383
4.90	9.42	500.8	-/+	28.4	2.2	14.2	0.0	0.290	1.334	306.4	26.9	16.455	0.308	4.411	27.2	171.3	51.9	70.3	0.947
45490.0	45568.9	0.213	167.6	-8.0	-3.33	0.782	87.1	0.382	0.735	175.2	248.9	0.454D	1.017	0.20	1.178	67.5	25.8	0.5	0.455
45568.9	45626.0	0.455	48.2	-11.0	-5.33	1.006	112.1	0.449	0.576	215.0	421.3	0.318	0.835A	8.41	1.883	108.0	129.9	41.6	0.394
4.94	9.75	84.9	-/+	25.1	0.4	15.7	0.0	0.289	1.334	309.4	27.3	16.849	0.286	4.673	27.9	169.9	51.7	69.0	1.031
45500.0	45569.8	0.221	165.5	-7.2	-3.54	0.770	90.4	0.398	0.727	180.7	246.3	0.438D	1.016A	-0.40	1.171	66.6	28.6	-0.9	0.473
45569.8	45626.0	0.473	48.3	-11.2	-5.63	1.015	113.2	0.456	0.582	216.5	421.4	0.317	0.848A	8.74	1.888	108.2	129.0	42.0	0.407
5.06	10.12		-/+	22.0	0.0	17.2	0.0	0.288	1.334	311.6	27.7	17.092	0.265	5.233	28.5	168.5	51.5	68.5	1.121
45510.0	45570.8	0.240	161.9	-5.6	-3.85	0.764	94.8	0.414	0.722	186.9	244.6	0.423D	1.022A	-1.09	1.168	65.5	31.2	-2.4	0.493
45570.8	45626.0	0.493	48.4	-11.4	-5.99	1.025	114.3	0.464	0.590	218.2	421.5	0.316	0.863A	9.14	1.893	108.5	128.0	42.5	0.422
5.34	10.55		-/+	19.4	0.0	18.8	0.0	0.287	1.334	313.4	27.8	17.393	0.244	5.942	28.8	167.4	51.3	68.4	1.206
45520.0	45572.0	0.274	157.6	-3.4	-4.29	0.769	100.3	0.432	0.727	194.2	244.2	0.413D	1.040A	-1.89	1.171	64.4	33.2	-3.9	0.516
45572.0	45626.0	0.516	48.7	-11.8	-6.46	1.038	115.6	0.474	0.599	220.1	421.6	0.315	0.882A	9.65	1.900	108.8	126.9	43.1	0.441
5.92	11.10		-/+	17.3	0.0	20.6	0.0	0.287	1.334	314.9	27.0	17.892	0.222	6.658	28.3	166.8	51.2	68.4	1.257
45530.0	45573.3	0.331	153.3	-1.1	-4.89	0.794	107.2	0.452	0.748	203.6	246.2	0.410D	1.087A	-2.86	1.188	63.2	34.4	-5.6	0.547
45573.3	45626.0	0.547	49.2	-12.3	-7.16	1.054	117.2	0.487	0.611	222.4	421.8	0.313	0.909A	10.38	1.909	109.2	125.4	44.0	0.468
7.00	11.86		-/+	16.1	0.0	22.7	0.0	0.287	1.334	315.9	24.7	18.759	0.198	7.139	26.5	167.1	51.2	69.1	1.215
45540.0	45575.1	0.423	149.7	1.2	-5.70	0.857	115.1	0.482	0.810	216.4	252.4	0.419D	1.201A	-4.04	1.230	61.7	34.2	-7.4	0.591
45575.1	45626.0	0.591	50.0	-13.3	-8.33	1.079	119.3	0.507	0.631	225.4	422.0	0.311	0.951A	11.62	1.922	109.9	123.2	45.6	0.510
8.94	13.08	188.8	-/+	16.6	0.6	25.6	0.0	0.289	1.334	315.7	20.7	20.247	0.170	7.193	23.3	168.6	51.5	71.2	1.005
								ARRIVAL DATE = 2445628.0											
45470.0	45567.6	0.209	166.9	-7.8	-3.16	0.816	82.5	0.349	0.762	165.6	256.6	0.496D	1.028	1.30	1.198	69.7	19.9	3.5	0.416
45567.6	45628.0	0.416	49.7	-6.9	-3.09	0.986	110.0	0.438	0.563	211.2	427.6	0.317	0.810A	6.41	1.830	109.1	134.2	31.5	0.370
4.87	9.05	654.9	-/+	31.4	3.0	13.7	0.0	0.290	1.358	303.8	19.6	15.934	0.342	4.074	19.6	172.9	42.5	71.2	0.919
45480.0	45568.6	0.207	168.0	-8.3	-3.21	0.800	84.6	0.362	0.750	170.3	253.1	0.478D	1.021	0.76	1.189	68.8	23.2	2.0	0.432
45568.6	45628.0	0.432	49.6	-6.9	-3.20	0.994	111.0	0.444	0.568	212.8	427.6	0.316	0.821A	6.55	1.834	109.4	133.6	31.5	0.378
4.85	9.30	208.9	-/+	27.8	0.9	15.2	0.0	0.289	1.358	306.7	18.7	16.291	0.318	4.304	18.9	171.8	42.1	69.7	1.005
45490.0	45569.5	0.209	167.4	-8.3	-3.33	0.786	87.1	0.376	0.739	175.3	250.0	0.461D	1.017	0.20	1.180	67.9	26.3	0.5	0.448
45569.5	45628.0	0.448	49.6	-6.9	-3.33	1.002	112.0	0.451	0.573	214.3	427.7	0.315	0.832A	6.71	1.839	109.6	133.1	31.5	0.387
4.88	9.56		-/+	24.4	0.0	16.7	0.0	0.288	1.358	308.9	17.8	16.525	0.296	4.727	18.1	170.4	41.8	68.9	1.102
45500.0	45570.5	0.217	165.2	-7.5	-3.53	0.775	90.5	0.391	0.730	180.7	247.4	0.445D	1.016A	-0.40	1.174	67.0	29.1	-0.9	0.465
45570.5	45628.0	0.464	49.7	-7.0	-3.47	1.010	113.1	0.458	0.579	215.8	427.7	0.314	0.844A	6.87	1.844	109.8	132.5	31.5	0.397
4.99	9.84		-/+	21.4	0.0	18.2	0.0	0.287	1.358	310.5	16.4	16.688	0.274	5.397	16.9	169.1	41.4	68.7	1.207
45510.0	45571.5	0.235	161.5	-5.8	-3.83	0.769	94.7	0.406	0.727	187.0	245.8	0.432D	1.022A	-1.08	1.171	66.0	31.6	-2.4	0.483
45571.5	45628.0	0.483	49.8	-7.0	-3.63	1.020	114.2	0.466	0.586	217.5	427.8	0.313	0.859A	7.07	1.849	110.1	131.9	31.5	0.409
5.26	10.17		-/+	18.7	0.0	19.8	0.0	0.287	1.358	311.9	14.3	16.960	0.254	6.154	15.1	168.0	41.0	68.7	1.307

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
45520.0	45572.7	0.268	157.1	-3.5	-4.24	0.774	100.2	0.423	0.731	194.5	245.6	0.422D	1.040A	-1.86	1.175	65.0	33.6	-3.9	0.506
45572.7	45628.0	0.505	50.0	-7.1	-3.84	1.033	115.5	0.475	0.595	219.4	427.8	0.312	0.877A	7.31	1.856	110.5	131.1	31.5	0.423
5.82	10.58		-/+	16.7	0.0	21.7	0.0	0.287	1.358	312.9	10.9	17.427	0.232	6.893	12.3	167.5	40.6	69.2	1.365
45530.0	45574.C	0.324	152.8	-1.0	-4.81	0.800	106.8	0.442	0.753	204.0	247.8	0.421D	1.086A	-2.80	1.192	63.8	34.7	-5.6	0.534
45574.0	45628.0	0.534	50.4	-7.2	-4.14	1.049	117.1	0.488	0.607	221.6	427.9	0.310	0.903A	7.64	1.865	110.9	130.2	31.6	0.442
6.85	11.12		-/+	15.7	0.0	23.8	0.0	0.288	1.358	313.2	5.9	18.256	0.208	7.311	8.8	167.8	40.1	70.7	1.310
45540.0	45575.9	0.413	149.2	1.2	-5.56	0.861	114.4	0.470	0.815	217.1	254.3	0.432D	1.199A	-3.93	1.234	62.6	34.4	-7.5	0.575
45575.9	45628.0	0.575	51.1	-7.5	-4.61	1.072	119.2	0.507	0.626	224.6	428.0	0.308	0.943A	8.16	1.878	111.6	129.0	31.8	0.471
8.72	11.94		-/+	16.5	0.0	26.7	0.0	0.289	1.358	312.8	0.1	19.780	0.179	6.955	7.6	169.3	39.6	74.0	1.068
								ARRIVAL DATE = 2445630.0											
45470.0	45568.2	0.206	166.8	-8.1	-3.18	0.819	82.7	0.345	0.764	165.6	257.4	0.501D	1.028	1.30	1.199	70.0	20.4	3.6	0.411
45568.2	45630.0	0.411	51.5	-4.3	-1.89	0.980	109.7	0.440	0.560	210.3	433.4	0.314	0.806A	5.52	1.788	110.5	137.3	24.9	0.382
4.83	9.42	633.9	-/+	32.0	3.0	14.6	0.0	0.289	1.379	304.5	14.3	15.801	0.351	3.990	14.3	173.2	35.1	70.8	0.923
45480.0	45569.2	0.204	167.8	-8.6	-3.23	0.803	84.7	0.357	0.752	170.2	254.0	0.484D	1.021	0.76	1.191	69.1	23.7	2.0	0.426
45569.2	45630.0	0.425	51.4	-4.2	-1.95	0.988	110.7	0.445	0.564	211.8	433.4	0.313	0.816A	5.59	1.792	110.7	137.0	24.7	0.390
4.80	9.64	203.1	-/+	28.4	0.9	16.2	0.0	0.288	1.379	307.3	12.8	16.145	0.327	4.209	12.8	172.2	34.8	69.4	1.006
45490.0	45570.1	0.206	167.2	-8.5	-3.34	0.789	87.2	0.371	0.742	175.3	250.9	0.467D	1.017	0.20	1.183	68.3	26.7	0.5	0.441
45570.1	45630.0	0.441	51.4	-4.2	-2.01	0.995	111.7	0.452	0.569	213.3	433.4	0.312	0.826A	5.67	1.796	111.0	136.6	24.6	0.398
4.83	9.87		-/+	25.1	0.0	17.7	0.0	0.288	1.379	309.4	10.9	16.373	0.305	4.604	11.1	170.9	34.4	68.7	1.098
45500.0	45571.1	0.213	164.9	-7.6	-3.53	0.778	90.5	0.385	0.734	180.8	248.5	0.452D	1.016A	-0.40	1.177	67.4	29.5	-0.9	0.457
45571.1	45630.0	0.457	51.4	-4.2	-2.07	1.004	112.8	0.458	0.575	214.8	433.3	0.311	0.838A	5.76	1.801	111.2	136.1	24.4	0.408
4.94	10.13		-/+	22.1	0.0	19.2	0.0	0.287	1.379	310.9	8.5	16.536	0.283	5.214	8.9	169.6	34.0	68.6	1.194
45510.0	45572.1	0.230	161.2	-5.9	-3.81	0.773	94.7	0.399	0.730	187.2	246.9	0.439D	1.022A	-1.07	1.174	66.5	32.0	-2.4	0.475
45572.1	45630.0	0.475	51.6	-4.2	-2.15	1.013	113.9	0.466	0.581	216.4	433.3	0.310	0.852A	5.85	1.806	111.5	135.7	24.2	0.418
5.20	10.43		-/+	19.6	0.0	20.8	0.0	0.287	1.379	312.1	5.2	16.812	0.262	5.872	6.2	168.5	33.5	68.8	1.277
45520.0	45573.2	0.263	156.7	-3.6	-4.20	0.779	100.0	0.415	0.735	194.7	246.7	0.430D	1.040A	-1.84	1.178	65.5	33.9	-4.0	0.497
45573.2	45630.0	0.496	51.8	-4.2	-2.24	1.025	115.1	0.475	0.589	218.2	433.3	0.309	0.869A	5.97	1.813	111.8	135.2	24.0	0.430
5.73	10.78		-/+	17.8	0.0	22.6	0.0	0.287	1.379	312.9	0.7	17.289	0.240	6.455	4.2	168.0	33.0	69.7	1.310
45530.0	45574.6	0.318	152.4	-1.0	-4.75	0.805	106.5	0.434	0.758	204.4	249.1	0.429D	1.086A	-2.76	1.195	64.4	34.9	-5.7	0.524
45574.6	45630.0	0.524	52.1	-4.2	-2.37	1.040	116.7	0.488	0.600	220.4	433.3	0.307	0.893A	6.13	1.821	112.3	134.5	23.7	0.447
6.74	11.26		-/+	17.2	0.0	24.8	0.0	0.288	1.379	313.1	-4.9	18.134	0.216	6.693	7.0	168.4	32.4	71.7	1.229
45540.0	45576.4	0.405	148.7	1.3	-5.46	0.865	114.0	0.461	0.819	217.7	255.7	0.441D	1.197A	-3.85	1.236	63.2	34.6	-7.6	0.562
45576.4	45630.0	0.562	52.8	-4.3	-2.57	1.063	118.8	0.506	0.618	223.2	433.3	0.305	0.930A	6.36	1.834	112.9	133.7	23.4	0.471
8.55	11.96	275.4	-/+	18.4	0.9	27.6	0.0	0.290	1.379	312.1	-10.3	19.504	0.187	6.602	12.0	169.7	31.6	75.7	0.987
								ARRIVAL DATE = 2445632.0											
45470.0	45568.8	0.203	166.7	-8.3	-3.20	0.821	82.8	0.340	0.767	165.5	258.3	0.506D	1.027	1.30	1.201	70.3	20.9	3.6	0.405
45568.8	45632.0	0.405	53.6	-2.3	-1.00	0.974	109.2	0.441	0.556	209.2	438.5	0.311	0.801A	4.92	1.749	111.7	140.9	20.3	0.402
4.79	9.98	743.1	-/+	33.2	3.5	15.6	0.0	0.289	1.397	305.3	10.4	15.669	0.361	3.906	10.4	173.6	29.5	70.6	0.903
45480.0	45569.8	0.201	167.7	-8.9	-3.24	0.806	84.8	0.352	0.755	170.2	254.9	0.489D	1.021	0.76	1.193	69.5	24.1	2.0	0.419
45569.8	45632.0	0.419	53.5	-2.2	-1.02	0.981	110.3	0.446	0.560	210.6	438.5	0.310	0.810A	4.95	1.753	111.9	140.6	20.0	0.409
4.76	10.19	334.9	-/+	29.7	1.5	17.1	0.0	0.288	1.397	308.0	8.4	16.001	0.337	4.117	8.4	172.7	29.1	69.3	0.980
45490.0	45570.7	0.203	167.0	-8.7	-3.34	0.793	87.3	0.365	0.745	175.3	251.9	0.473D	1.016	0.20	1.185	68.6	27.2	0.5	0.434
45570.7	45632.0	0.434	53.4	-2.2	-1.05	0.988	111.3	0.452	0.565	212.1	438.4	0.309	0.820A	4.99	1.757	112.1	140.3	19.8	0.417
4.78	10.41		-/+	26.4	0.0	18.6	0.0	0.287	1.397	310.4	6.0	16.319	0.314	4.376	6.1	171.4	28.8	68.3	1.061
45500.0	45571.7	0.210	164.6	-7.8	-3.52	0.782	90.5	0.378	0.737	180.9	249.5	0.458D	1.016A	-0.40	1.179	67.8	29.9	-1.0	0.450
45571.7	45632.0	0.450	53.5	-2.2	-1.08	0.996	112.3	0.459	0.570	213.6	438.4	0.308	0.831A	5.03	1.761	112.4	140.0	19.6	0.426
4.88	10.66		-/+	23.6	0.0	20.1	0.0	0.287	1.397	311.8	3.0	16.485	0.293	4.900	3.4	170.1	28.4	68.4	1.141
45510.0	45572.7	0.226	160.8	-6.0	-3.79	0.778	94.7	0.393	0.734	187.3	248.0	0.446D	1.022A	-1.06	1.177	66.9	32.4	-2.5	0.467
45572.7	45632.0	0.467	53.6	-2.2	-1.11	1.005	113.4	0.466	0.575	215.1	438.4	0.307	0.844A	5.07	1.766	112.6	139.6	19.3	0.436
5.14	10.94		-/+	21.2	0.0	21.7	0.0	0.287	1.397	312.9	-0.7	16.767	0.271	5.436	2.5	169.1	28.0	68.8	1.203
45520.0	45573.8	0.258	156.3	-3.6	-4.17	0.784	99.9	0.408	0.739	195.0	247.9	0.438D	1.041A	-1.82	1.181	66.0	34.2	-4.0	0.488
45573.8	45632.0	0.488	53.8	-2.2	-1.15	1.016	114.7	0.475	0.583	216.9	438.3	0.306	0.859A	5.12	1.772	113.0	139.2	19.0	0.447
5.65	11.27		-/+	19.6	0.0	23.5	0.0	0.288	1.397	313.7	-5.4	17.254	0.249	5.873	6.3	168.6	27.5	69.9	1.213
45530.0	45575.2	0.313	152.0	-1.0	-4.69	0.809	106.2	0.426	0.762	204.8	250.4	0.437D	1.086A	-2.71	1.198	64.9	35.2	-5.7	0.514
45575.2	45632.0	0.514	54.1	-2.2	-1.20	1.030	116.2	0.486	0.593	219.0	438.3	0.304	0.881A	5.19	1.780	113.4	138.8	18.6	0.463
6.64	11.72		-/+	19.2	0.0	25.7	0.0	0.289	1.397	313.9	-10.8	18.108	0.224	5.998	11.5	168.9	26.9	72.1	1.121
45540.0	45577.0	0.398	148.3	1.4	-5.37	0.868	113.5	0.453	0.823	218.2	257.1	0.450D	1.196A	-3.78	1.239	63.8	34.8	-7.7	0.550
45577.0	45632.0	0.550	54.7	-2.1	-1.28	1.051	118.2	0.503	0.608	221.7	438.2	0.302	0.915A	5.29	1.793	114.1	138.1	18.1	0.485
8.40	12.37	724.9	-/+	20.6	2.5	28.5	0.0	0.291	1.397	312.1	-15.4	19.205	0.195	6.371	16.3	170.1	26.1	76.9	0.898
								ARRIVAL DATE = 2445634.0											
45470.0	45569.4	0.200	166.5	-8.6	-3.22	0.824	82.9	0.335	0.769	165.5	259.3	0.511D	1.027	1.30	1.203	70.6	21.4	3.7	0.399
45569.4	45634.0	0.399	56.0	-0.7	-0.29	0.966	108.7	0.442	0.551	207.9	443.2	0.308	0.795A	4.49	1.712	112.6	144.7	16.9	0.425
4.75	10.64	927.6	-/+	34.8	4.5	16.6	0.0	0.288	1.411	306.3	7.3	15.532	0.372	3.821	7.5	173.9	25.1	70.5	0.872
45480.0	45570.4	0.198	167.5	-9.1	-3.25	0.809	84.9	0.347	0.758	170.2	255.9	0.495D	1.021	0.76	1.195	69.8	24.6	2.1	0.413
45570.4	45634.0	0.413	55.8	-0.7	-0.30	0.973	109.8	0.447	0.555	209.3	443.1	0.307	0.804A	4.50	1.716	112.8	144.5	16.7	0.432
4.72	10.84	543.3	-/+	31.3	2.5	18.1	0.0	0.287	1.411	308.9	5.0	15.852	0.347	4.022	5.1	173.1	24.8	69.3	0.940
45490.0	45571.3	0.199	166.7	-9.0	-3.35	0.796	87.4	0.359	0.748	175.3	252.9	0.479D	1.016	0.20	1.187	69.0	27.6	0.5	0.427
45571.3	45634.0	0.427	55.8	-0.7	-0.30	0.980	110.8	0.453	0.559	210.8	443.0	0.306	0.813A	4.51	1.720	113.1	144.2	16.4	0.440
4.73	11.06	188.9	-/+	28.2	0.9	19.6	0.0	0.287	1.411	311.3	2.4	16.188	0.324	4.237	2.4	171.9	24.4	68.3	1.009
45500.0	45572.3	0.206	164.3	-8.0	-3.51	0.786	90.6	0.372	0.740	181.0	250.5	0.465D	1.016A	-0.39	1.182	68.2	30.4	-1.0	0.443
45572.3	45634.0	0.442	55.8	-0.6	-0.31	0.987	111.8	0.459	0.564	212.2	443.0	0.305	0.823A	4.52	1.724	113.3	144.0	16.2	0.448
4.83	11.30		-/+	25.4	0.0	21.1	0.0	0.287	1.411	313.1	-0.8	16.478	0.302	4.552	1.1	170.7	24.1	68.0	1.074

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DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
45510.0	45573.3	0.222	160.4	-6.1	-3.76	0.782	94.6	0.386	0.737	187.5	249.1	0.453D	1.022A	-1.05	1.180	67.3	32.8	-2.5	0.459
45573.3	45634.0	0.459	55.8	-0.6	-0.32	0.996	112.9	0.466	0.569	213.7	442.9	0.304	0.835A	4.53	1.729	113.6	143.7	15.9	0.457
5.07	11.56		-/+	23.1	0.0	22.7	0.0	0.287	1.411	314.2	-4.6	16.763	0.281	4.984	4.9	169.6	23.7	68.6	1.119
45520.0	45574.4	0.254	155.9	-3.6	-4.13	0.788	99.7	0.400	0.743	195.2	249.1	0.446D	1.041A	-1.80	1.184	66.4	34.6	-4.1	0.479
45574.4	45634.0	0.479	56.0	-0.6	-0.33	1.006	114.1	0.474	0.576	215.4	442.8	0.303	0.849A	4.55	1.734	113.9	143.4	15.6	0.469
5.58	11.88		-/+	21.7	0.0	24.5	0.0	0.288	1.411	314.9	-9.2	17.252	0.258	5.314	9.5	169.1	23.3	69.8	1.115
45530.0	45575.8	0.307	151.5	-1.0	-4.63	0.814	105.9	0.418	0.766	205.2	251.7	0.446D	1.086A	-2.67	1.201	65.5	35.5	-5.8	0.504
45575.8	45634.0	0.504	56.3	-0.6	-0.34	1.020	115.6	0.485	0.585	217.5	442.7	0.301	0.869A	4.56	1.742	114.4	143.1	15.1	0.483
6.53	12.31	121.7	-/+	21.4	0.5	26.6	0.0	0.289	1.411	314.8	-14.1	18.031	0.233	5.497	14.5	169.4	22.7	72.3	1.022
									ARRIVAL DATE = 2445636.0										
45480.0	45571.1	0.195	167.3	-9.4	-3.27	0.812	85.0	0.342	0.761	170.2	256.9	0.501D	1.021	0.76	1.197	70.2	25.2	2.1	0.406
45571.1	45636.0	0.406	58.5	0.7	0.30	0.965	109.2	0.448	0.550	208.0	447.2	0.304	0.797A	4.17	1.682	113.7	148.5	14.2	0.457
4.67	11.56	800.2	-/+	33.3	3.8	19.1	0.0	0.287	1.423	309.9	2.4	15.698	0.359	3.925	2.9	173.6	21.2	69.3	0.893
45490.0	45572.0	0.196	166.5	-9.2	-3.35	0.800	87.5	0.354	0.751	175.4	254.0	0.485D	1.016	0.20	1.190	69.4	28.1	0.5	0.420
45572.0	45636.0	0.420	58.3	0.7	0.31	0.971	110.2	0.453	0.554	209.4	447.2	0.303	0.806A	4.16	1.685	113.9	148.3	13.9	0.464
4.68	11.77	472.2	-/+	30.2	2.2	20.6	0.0	0.287	1.423	312.2	-0.3	16.019	0.336	4.128	0.7	172.5	21.0	68.5	0.953
45500.0	45573.0	0.202	163.9	-8.2	-3.50	0.790	90.6	0.366	0.744	181.1	251.7	0.472D	1.016A	-0.39	1.185	68.6	30.9	-1.0	0.435
45573.0	45636.0	0.435	58.3	0.7	0.31	0.978	111.2	0.459	0.558	210.8	447.1	0.302	0.815A	4.15	1.690	114.1	148.1	13.7	0.472
4.77	11.99	207.5	-/+	27.5	0.9	22.1	0.0	0.287	1.423	314.1	-3.5	16.363	0.313	4.351	3.5	171.2	20.6	68.1	1.005
45510.0	45574.0	0.218	160.0	-6.2	-3.74	0.786	94.6	0.379	0.741	187.6	250.3	0.461D	1.022A	-1.04	1.183	67.8	33.2	-2.5	0.451
45574.0	45636.0	0.451	58.3	0.6	0.32	0.986	112.3	0.466	0.563	212.3	447.0	0.301	0.826A	4.14	1.694	114.4	147.9	13.4	0.481
5.01	12.25	58.0	-/+	25.3	0.2	23.7	0.0	0.288	1.423	315.5	-7.2	16.743	0.291	4.602	7.3	170.2	20.3	68.4	1.037
45520.0	45575.1	0.249	155.4	-3.7	-4.09	0.793	99.6	0.393	0.747	195.5	250.4	0.454D	1.041A	-1.77	1.187	66.9	34.9	-4.1	0.469
45575.1	45636.0	0.469	58.4	0.6	0.32	0.996	113.5	0.473	0.569	213.9	446.9	0.300	0.839A	4.13	1.700	114.7	147.7	13.1	0.492
5.50	12.56	115.0	-/+	24.0	0.5	25.5	0.0	0.288	1.423	316.1	-11.5	17.193	0.269	4.907	11.7	169.7	19.9	69.8	1.024
45530.0	45576.4	0.302	151.0	-0.9	-4.56	0.818	105.7	0.409	0.770	205.6	253.1	0.455D	1.086A	-2.63	1.204	66.0	35.7	-5.9	0.493
45576.4	45636.0	0.493	58.7	0.6	0.33	1.009	115.0	0.484	0.578	215.9	446.7	0.298	0.857A	4.11	1.707	115.2	147.4	12.7	0.506
6.43	12.96	540.4	-/+	23.8	2.1	27.6	0.0	0.290	1.423	315.4	-15.9	17.772	0.244	5.312	16.2	170.0	19.5	72.9	0.937
									ARRIVAL DATE = 2445638.0										
45490.0	45572.7	0.192	166.2	-9.5	-3.35	0.803	87.6	0.347	0.754	175.4	255.2	0.492D	1.016	0.20	1.192	69.8	28.7	0.5	0.413
45572.7	45638.0	0.412	61.2	1.8	0.83	0.962	109.5	0.454	0.549	207.9	450.9	0.300	0.798A	3.89	1.654	114.6	152.5	12.0	0.490
4.63	12.51	789.0	-/+	32.5	3.7	21.8	0.0	0.287	1.432	313.1	-2.3	15.844	0.348	4.017	2.6	173.1	18.1	68.7	0.895
45500.0	45573.7	0.198	163.6	-8.3	-3.50	0.794	90.7	0.359	0.747	181.2	252.9	0.479D	1.016A	-0.39	1.187	69.0	31.3	-1.0	0.427
45573.7	45638.0	0.427	61.1	1.8	0.84	0.969	110.5	0.460	0.553	209.2	450.8	0.299	0.807A	3.87	1.658	114.8	152.4	11.8	0.498
4.72	12.73	549.9	-/+	29.9	2.5	23.3	0.0	0.287	1.432	315.0	-5.4	16.171	0.325	4.226	5.4	171.9	17.9	68.4	0.938
45510.0	45574.7	0.214	159.5	-6.3	-3.72	0.791	94.6	0.371	0.745	187.8	251.6	0.468D	1.022A	-1.03	1.186	68.2	33.6	-2.6	0.442
45574.7	45638.0	0.442	61.0	1.7	0.85	0.976	111.6	0.466	0.557	210.7	450.6	0.298	0.817A	3.84	1.663	115.1	152.2	11.5	0.506
4.94	12.97	428.2	-/+	27.8	1.9	24.8	0.0	0.288	1.432	316.3	-9.0	16.533	0.303	4.463	9.0	170.8	17.6	68.8	0.961
45520.0	45575.7	0.244	154.9	-3.7	-4.05	0.798	99.5	0.385	0.752	195.8	251.8	0.462D	1.041A	-1.75	1.191	67.4	35.3	-4.2	0.460
45575.7	45638.0	0.460	61.1	1.7	0.87	0.985	112.8	0.473	0.563	212.3	450.5	0.297	0.829A	3.81	1.668	115.4	152.0	11.2	0.516
5.42	13.27	512.6	-/+	26.5	2.1	26.6	0.0	0.289	1.432	316.8	-13.0	16.958	0.280	4.747	13.1	170.3	17.2	70.3	0.944
45530.0	45577.1	0.296	150.5	-0.9	-4.50	0.823	105.4	0.401	0.775	206.1	254.6	0.464D	1.086A	-2.59	1.208	66.6	36.0	-6.0	0.482
45577.1	45638.0	0.482	61.3	1.7	0.89	0.997	114.3	0.482	0.570	214.2	450.3	0.295	0.845A	3.78	1.675	115.8	151.8	10.8	0.530
6.33	13.65	960.8	-/+	26.3	3.8	28.6	0.0	0.291	1.432	316.0	-16.9	17.505	0.255	5.124	17.1	170.5	16.8	73.4	0.863
									ARRIVAL DATE = 2445640.0										
45500.0	45574.4	0.194	163.1	-8.5	-3.49	0.799	90.7	0.352	0.751	181.3	254.2	0.487D	1.016A	-0.39	1.190	69.4	31.9	-1.0	0.418
45574.4	45640.0	0.418	64.1	2.8	1.29	0.959	109.8	0.460	0.547	207.6	454.1	0.295	0.798A	3.65	1.630	115.4	156.7	10.3	0.524
4.66	13.49	915.3	-/+	32.5	4.2	24.4	0.0	0.288	1.438	316.0	-6.9	15.974	0.339	4.099	6.9	172.5	15.5	68.6	0.874
45510.0	45575.4	0.209	159.0	-6.4	-3.70	0.796	94.6	0.364	0.749	188.0	253.0	0.477D	1.022A	-1.02	1.189	68.7	34.1	-2.6	0.433
45575.4	45640.0	0.433	64.0	2.7	1.31	0.966	110.9	0.466	0.551	209.0	453.9	0.294	0.807A	3.61	1.634	115.6	156.5	10.0	0.532
4.88	13.72	815.7	-/+	30.4	3.6	26.0	0.0	0.289	1.438	317.2	-10.2	16.316	0.316	4.320	10.2	171.5	15.3	69.1	0.890
45520.0	45576.5	0.240	154.3	-3.7	-4.01	0.803	99.3	0.377	0.756	196.2	253.3	0.471D	1.041A	-1.73	1.194	68.0	35.7	-4.3	0.450
45576.5	45640.0	0.450	64.0	2.7	1.33	0.974	112.0	0.472	0.556	210.6	453.8	0.293	0.818A	3.57	1.639	115.9	156.4	9.7	0.542
5.34	14.00	921.0	-/+	29.1	3.9	27.7	0.0	0.290	1.438	317.6	-13.9	16.717	0.293	4.585	13.9	171.0	15.0	70.7	0.872

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
									ARRIVAL DATE = 2446436.0										
46100.0	46321.5	0.348	102.2	19.7	-1.38	0.879	70.0	0.409	0.796	143.1	461.0	0.471	1.122	-4.29	1.235	113.5	315.1	-9.6	0.508
46321.5	46436.0	0.508	296.1	-6.4	-3.37	1.070	55.0	0.452	0.611	135.8	278.0	0.335D	0.888	6.47	1.653	67.1	324.2	12.2	0.811
7.35	21.90		+/-	19.1	0.0	141.2	0.0	1.357	1.324	36.9	-9.5	17.888	0.230	6.029	167.4	11.4	161.9	104.1	1.154
46110.0	46328.4	0.355	111.3	16.5	-2.35	0.871	69.5	0.421	0.789	144.4	463.3	0.457	1.122	-4.79	1.231	114.4	325.0	-10.3	0.525
46328.4	46436.0	0.526	304.8	-4.9	-2.74	1.049	63.9	0.478	0.594	139.2	270.3	0.310D	0.879	5.61	1.639	64.5	327.9	9.7	0.859
7.48	23.31	312.7	+/-	20.7	1.1	152.4	0.0	1.394	1.324	47.5	-14.9	18.572	0.215	5.893	163.1	12.6	166.3	104.3	0.981
									ARRIVAL DATE = 2446438.0										
46100.0	46320.2	0.331	101.6	20.1	-1.16	0.880	71.1	0.394	0.797	143.5	459.4	0.483	1.111	-4.13	1.235	112.5	313.8	-9.7	0.488
46320.2	46438.0	0.488	295.1	-9.9	-4.85	1.081	66.3	0.427	0.621	133.6	283.5	0.356D	0.886	7.78	1.650	69.3	326.1	10.4	0.742
7.00	19.87		+/-	18.4	0.0	139.1	0.0	1.349	1.343	34.4	0.6	17.073	0.249	6.253	170.1	11.0	156.5	104.7	1.307
46110.0	46326.8	0.333	110.5	17.0	-2.03	0.872	71.0	0.402	0.790	145.0	461.3	0.473	1.108	-4.56	1.231	113.2	323.4	-10.4	0.499
46326.8	46438.0	0.500	303.7	-7.2	-3.73	1.063	65.5	0.449	0.606	136.8	276.1	0.334D	0.878	6.41	1.638	66.9	329.7	12.5	0.779
7.03	20.95		+/-	19.7	0.0	149.8	0.0	1.385	1.343	45.0	-9.2	17.687	0.237	5.848	167.1	12.2	161.7	104.6	1.150
46120.0	46333.7	0.339	119.2	13.6	-2.92	0.862	70.7	0.415	0.783	146.3	463.7	0.458	1.107	-4.91	1.227	114.1	333.3	-10.7	0.516
46333.7	46438.0	0.517	312.4	-5.6	-3.09	1.041	64.4	0.475	0.589	140.3	268.5	0.309D	0.868	5.50	1.623	64.3	333.6	9.8	0.825
7.16	22.30	319.8	+/-	21.3	1.2	160.9	0.0	1.421	1.343	55.4	-13.6	18.350	0.222	5.729	163.9	13.1	166.3	105.0	0.980
									ARRIVAL DATE = 2446440.0										
46100.0	46319.5	0.322	101.3	20.3	-1.05	0.880	71.7	0.386	0.798	143.8	458.5	0.490	1.105	-4.05	1.235	112.0	313.1	-9.7	0.477
46319.5	46440.0	0.478	294.6	-14.8	-6.97	1.090	67.4	0.407	0.628	131.9	288.4	0.373D	0.884	9.73	1.648	71.1	328.2	22.4	0.692
6.83	18.39		+/-	18.8	0.0	138.0	0.0	1.346	1.360	30.5	15.4	16.766	0.260	6.131	160.0	10.9	149.9	106.9	1.333
46110.0	46325.5	0.316	109.8	17.4	-1.80	0.872	72.1	0.388	0.791	145.5	459.7	0.484	1.097	-4.40	1.231	112.2	322.1	-10.5	0.481
46325.5	46440.0	0.481	302.8	-10.5	-5.07	1.075	66.7	0.425	0.615	134.7	281.6	0.354D	0.876	7.59	1.637	69.0	331.4	16.5	0.712
6.71	18.98		+/-	19.0	0.0	147.7	0.0	1.379	1.360	42.4	-0.0	16.911	0.256	6.067	169.4	11.9	156.2	105.2	1.298
46120.0	46332.1	0.318	118.2	14.0	-2.60	0.863	72.1	0.396	0.784	147.0	461.8	0.473	1.094	-4.68	1.227	112.9	331.6	-10.8	0.492
46332.1	46440.0	0.492	311.3	-7.9	-4.01	1.056	65.9	0.447	0.600	138.0	274.3	0.332D	0.868	6.23	1.625	66.7	335.2	12.5	0.747
6.74	20.01		+/-	20.3	0.0	158.3	0.0	1.413	1.360	52.8	-8.3	17.524	0.244	5.674	167.4	12.7	161.6	105.3	1.142
46130.0	46338.9	0.324	126.5	10.5	-3.38	0.853	71.8	0.409	0.776	148.4	464.1	0.459	1.094	-4.87	1.223	113.8	341.5	-10.8	0.508
46338.9	46440.0	0.508	319.8	-6.3	-3.39	1.033	64.9	0.473	0.583	141.5	266.8	0.307D	0.859	5.29	1.610	64.1	339.2	9.7	0.791
6.86	21.30	335.6	+/-	21.9	1.3	169.4	0.0	1.447	1.360	63.0	-11.7	18.140	0.229	5.576	165.3	13.3	166.3	106.0	0.977
									ARRIVAL DATE = 2446442.0										
46100.0	46319.8	0.325	101.4	20.2	-1.09	0.880	71.5	0.389	0.797	143.7	458.8	0.487	1.107	-4.08	1.235	112.2	313.4	-9.7	0.481
46319.8	46442.0	0.481	294.8	-21.1	-9.79	1.095	68.2	0.392	0.633	130.7	292.3	0.385D	0.881	12.35	1.646	72.5	331.1	30.3	0.666
6.89	17.64		+/-	21.2	0.0	138.4	0.0	1.347	1.375	24.6	31.2	17.250	0.256	5.441	144.3	10.9	142.5	110.2	1.137
46110.0	46324.8	0.307	109.4	17.7	-1.68	0.873	72.7	0.380	0.791	145.8	458.9	0.491	1.092	-4.31	1.232	111.7	321.3	-10.5	0.470
46324.8	46442.0	0.471	302.2	-14.9	-6.93	1.084	67.7	0.405	0.622	133.1	286.6	0.370D	0.875	9.26	1.638	70.8	333.2	22.1	0.661
6.54	17.49		+/-	19.1	0.0	146.5	0.0	1.375	1.375	38.8	12.9	16.574	0.267	6.021	161.6	11.7	149.8	107.2	1.343
46120.0	46330.7	0.302	117.4	14.5	-2.36	0.864	73.2	0.382	0.785	147.7	460.3	0.485	1.085	-4.52	1.228	112.0	330.2	-10.9	0.474
46330.7	46442.0	0.474	310.3	-10.9	-5.23	1.068	67.1	0.423	0.609	136.0	279.9	0.351D	0.867	7.29	1.628	68.8	336.7	16.4	0.681
6.43	18.08		+/-	19.6	0.0	156.1	0.0	1.406	1.375	50.2	0.0	16.773	0.263	5.877	168.9	12.4	156.0	105.9	1.284
46130.0	46337.2	0.303	125.4	10.9	-3.07	0.854	73.2	0.391	0.778	149.2	462.3	0.473	1.082	-4.65	1.224	112.6	339.7	-10.9	0.485
46337.2	46442.0	0.485	318.6	-8.4	-4.24	1.049	66.3	0.446	0.594	139.3	272.7	0.329D	0.859	5.97	1.615	66.4	340.6	12.4	0.715
6.46	19.08		+/-	21.0	0.0	166.7	0.0	1.439	1.375	60.3	-6.7	17.367	0.252	5.498	168.1	12.9	161.6	106.3	1.132
46140.0	46344.0	0.310	133.3	7.3	-3.75	0.844	73.0	0.404	0.770	150.6	464.8	0.459	1.082	-4.69	1.219	113.5	349.6	-10.5	0.501
46344.0	46442.0	0.501	327.0	-6.8	-3.64	1.025	65.4	0.473	0.577	142.8	265.2	0.304D	0.849	5.01	1.599	63.9	344.8	9.5	0.758
6.59	20.33	373.7	+/-	22.6	1.4	177.8	0.0	1.471	1.375	70.4	-9.3	17.954	0.236	5.442	167.1	13.3	166.6	107.1	0.969
									ARRIVAL DATE = 2446444.0										
46110.0	46324.9	0.309	109.4	17.6	-1.69	0.873	72.6	0.381	0.791	145.8	459.0	0.490	1.093	-4.32	1.232	111.8	321.4	-10.5	0.472
46324.9	46444.0	0.472	302.3	-20.4	-9.33	1.089	68.5	0.391	0.627	132.0	290.8	0.382D	0.872	11.45	1.640	72.2	335.6	29.4	0.632
6.56	16.63		+/-	20.9	0.0	146.7	0.0	1.375	1.388	33.8	27.2	16.878	0.266	5.523	147.9	11.7	142.6	110.2	1.203
46120.0	46330.0	0.293	116.9	14.7	-2.23	0.864	73.8	0.375	0.785	148.1	459.4	0.491	1.079	-4.43	1.228	111.5	329.4	-11.0	0.464
46330.0	46444.0	0.464	309.7	-14.9	-6.86	1.077	68.1	0.404	0.616	134.4	285.0	0.367D	0.866	8.73	1.632	70.5	338.2	21.7	0.631
6.27	16.60		+/-	19.6	0.0	154.9	0.0	1.402	1.388	46.9	11.3	16.424	0.275	5.874	162.5	12.3	149.7	107.6	1.339
46130.0	46335.9	0.288	124.3	11.4	-2.84	0.855	74.3	0.378	0.778	150.0	460.9	0.484	1.073	-4.49	1.224	111.8	338.2	-11.0	0.468
46335.9	46444.0	0.468	317.6	-11.2	-5.35	1.061	67.4	0.423	0.603	137.3	278.4	0.348D	0.858	6.91	1.621	68.5	341.9	16.2	0.651
6.18	17.19		+/-	20.3	0.0	164.5	0.0	1.432	1.388	57.7	0.8	16.661	0.270	5.682	168.7	12.6	156.0	106.8	1.265
46140.0	46342.3	0.290	131.9	7.8	-3.45	0.845	74.4	0.387	0.771	151.6	463.0	0.473	1.070	-4.48	1.220	112.4	347.6	-10.6	0.478
46342.3	46444.0	0.479	325.7	-8.9	-4.43	1.041	66.7	0.445	0.588	140.6	271.3	0.326D	0.850	5.63	1.608	66.2	346.1	12.2	0.684
6.21	18.15		+/-	21.7	0.0	175.0	0.0	1.463	1.388	67.4	-4.5	17.236	0.259	5.319	169.1	12.9	161.7	107.5	1.117
46150.0	46349.0	0.295	139.5	4.2	-4.00	0.835	74.3	0.399	0.764	153.1	465.4	0.459	1.069	-4.37	1.215	113.3	357.4	-9.9	0.492
46349.0	46444.0	0.493	333.9	-7.3	-3.87	1.016	65.9	0.472	0.571	144.1	263.9	0.301D	0.840	4.66	1.592	63.7	350.4	9.2	0.725
6.31	19.37	421.7	+/-	23.4	1.6	185.9	0.0	1.493	1.388	77.4	-6.3	17.759	0.244	5.303	169.1	13.0	166.8	108.3	0.960
									ARRIVAL DATE = 2446446.0										
46110.0	46325.8	0.320	110.0	17.3	-1.86	0.872	71.8	0.391	0.791	145.4	460.2	0.481	1.100	-4.44	1.231	112.5	322.4	-10.5	0.485
46325.8	46446.0	0.485	303.0	-26.3	-12.17	1.092	69.1	0.380	0.629	131.4	294.0	0.390D	0.869	14.04	1.644	73.3	338.9	37.7	0.624
6.79	16.42	499.8	+/-	24.3	2.0	148.2	0.0	1.380	1.398	28.7	39.0	17.579	0.251	5.175	135.5	11.9	135.0	112.5	0.945
46120.0	46329.9	0.293	116.8	14.7	-2.23	0.864	73.8	0.375	0.785	148.1	459.4	0.491	1.079	-4.42	1.228	111.5	329.3	-11.0	0.464
46329.9	46446.0	0.464	309.7	-19.8	-8.94	1.083	68.8	0.390	0.621	133.3	289.4	0.379D	0.864	10.59	1.637	72.0	340.2	28.6	0.598
6.26	15.66		+/-	20.9	0.0	154.9	0.0	1.402	1.398	42.5	24.1	16.599	0.275	5.512	150.7	12.2	142.6	110.3	1.242

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
46130.0	46335.0	0.279	123.6	11.6	-2.70	0.856	74.9	0.371	0.779	150.5	460.1	0.490	1.068	-4.40	1.224	111.3	337.3	-11.0	0.458
46335.0	46446.0	0.458	316.9	-14.9	-6.80	1.070	68.3	0.404	0.610	135.7	283.6	0.364D	0.857	8.17	1.628	70.3	343.2	21.3	0.600
6.02	15.71		+/-	20.2	0.0	163.2	0.0	1.428	1.398	54.6	10.8	16.300	0.282	5.693	162.9	12.5	149.6	108.2	1.323
46140.0	46340.9	0.275	130.6	8.2	-3.22	0.846	75.5	0.374	0.772	152.6	461.6	0.483	1.062	-4.33	1.220	111.6	346.0	-10.7	0.462
46340.9	46446.0	0.462	324.6	-11.5	-5.44	1.053	67.8	0.423	0.597	138.7	277.1	0.345D	0.850	6.48	1.617	68.3	347.2	15.9	0.620
5.94	16.30		+/-	21.0	0.0	172.7	0.0	1.456	1.398	64.9	2.3	16.557	0.277	5.476	168.5	12.6	156.0	107.8	1.241
46150.0	46347.2	0.276	137.8	4.8	-3.71	0.836	75.8	0.383	0.765	154.3	463.7	0.472	1.059	-4.18	1.216	112.3	355.3	-10.0	0.471
46347.2	46446.0	0.472	332.5	-9.3	-4.59	1.032	67.1	0.445	0.582	141.9	270.1	0.323D	0.841	5.25	1.604	66.0	351.5	11.9	0.652
5.96	17.24		+/-	22.5	0.0	183.0	0.0	1.485	1.398	74.2	-1.9	17.114	0.266	5.130	170.0	12.6	161.8	108.7	1.100
46160.0	46353.9	0.281	145.2	1.3	-4.15	0.825	75.7	0.396	0.758	155.7	466.1	0.458	1.058	-3.94	1.210	113.1	5.0	-9.1	0.485
46353.9	46446.0	0.485	340.5	-7.7	-4.06	1.006	66.4	0.472	0.565	145.5	262.9	0.298D	0.832	4.27	1.587	63.5	356.1	8.8	0.693
6.05	18.42	498.1	+/-	24.3	2.0	193.8	0.0	1.514	1.398	84.2	-3.0	17.573	0.252	5.172	170.8	12.6	167.2	109.6	0.945
								ARRIVAL DATE = 2446448.0										
46120.0	46330.7	0.302	117.4	14.5	-2.36	0.864	73.2	0.382	0.785	147.7	460.3	0.484	1.085	-4.52	1.228	112.0	330.2	-10.9	0.474
46330.7	46448.0	0.474	310.3	-25.1	-11.39	1.086	69.4	0.380	0.624	132.7	293.0	0.386D	0.861	12.79	1.644	73.0	342.8	36.4	0.586
6.43	15.29	106.9	+/-	23.6	0.4	156.2	0.0	1.406	1.407	37.6	35.1	17.301	0.264	4.982	139.2	12.4	135.2	113.0	1.026
46130.0	46334.9	0.278	123.5	11.7	-2.68	0.856	75.0	0.369	0.779	150.6	460.0	0.491	1.067	-4.39	1.225	111.2	337.1	-11.0	0.457
46334.9	46448.0	0.457	316.8	-19.2	-8.61	1.076	69.0	0.391	0.615	134.7	288.2	0.375D	0.856	9.77	1.637	71.7	344.8	27.8	0.566
6.00	14.72		+/-	21.2	0.0	163.0	0.0	1.427	1.407	50.8	22.0	16.393	0.284	5.427	152.7	12.5	142.6	110.5	1.256
46140.0	46340.0	0.266	129.8	8.5	-3.08	0.847	76.2	0.367	0.773	153.2	460.8	0.489	1.057	-4.25	1.221	111.2	345.0	-10.7	0.453
46340.0	46448.0	0.453	323.9	-14.8	-6.73	1.062	68.6	0.405	0.604	137.2	282.5	0.360D	0.849	7.59	1.628	70.0	348.2	23.8	0.570
5.79	14.84		+/-	21.0	0.0	171.3	0.0	1.452	1.407	62.0	11.0	16.207	0.289	5.490	162.8	12.4	149.6	108.9	1.298
46150.0	46345.8	0.262	136.2	5.2	-3.50	0.837	76.8	0.371	0.767	155.3	462.4	0.482	1.051	-4.05	1.216	111.5	353.6	-10.1	0.456
46345.8	46448.0	0.456	331.3	-11.8	-5.51	1.045	68.1	0.423	0.591	140.1	276.1	0.341D	0.841	6.02	1.617	68.1	352.4	15.4	0.590
5.71	15.42		+/-	21.9	0.0	180.6	0.0	1.479	1.407	71.6	4.4	16.471	0.285	5.261	168.0	12.3	156.1	108.9	1.213
46160.0	46352.0	0.262	143.0	1.9	-3.88	0.827	77.2	0.380	0.760	157.2	464.5	0.471	1.048	-3.77	1.211	112.1	2.7	-9.1	0.465
46352.0	46448.0	0.465	339.0	-9.6	-4.72	1.024	67.5	0.445	0.576	143.3	269.3	0.320D	0.833	4.82	1.603	65.9	357.0	11.4	0.621
5.72	16.33		+/-	23.4	0.0	190.7	0.0	1.506	1.407	80.7	1.2	17.007	0.274	4.930	170.3	12.1	162.0	110.1	1.077
46170.0	46358.5	0.266	150.1	-1.3	-4.18	0.815	77.4	0.391	0.753	158.7	466.8	0.458	1.047	-3.40	1.206	112.9	12.2	-8.0	0.477
46358.5	46448.0	0.477	346.7	-8.2	-4.23	0.998	66.9	0.472	0.560	146.8	262.3	0.296D	0.823	3.87	1.587	63.5	1.6	8.3	0.660
5.78	17.46	581.4	+/-	25.3	2.3	201.3	0.0	1.533	1.407	90.5	0.6	17.367	0.261	5.028	171.7	12.0	167.5	110.7	0.930
								ARRIVAL DATE = 2446450.0										
46130.0	46335.6	0.285	124.1	11.5	-2.79	0.855	74.5	0.375	0.779	150.2	460.6	0.486	1.071	-4.46	1.224	111.6	337.9	-11.0	0.464
46335.6	46450.0	0.464	317.4	-24.0	-10.75	1.079	69.6	0.381	0.618	134.1	292.1	0.382D	0.853	11.65	1.647	72.8	346.8	35.3	0.550
6.12	14.25		+/-	23.4	0.0	164.0	0.0	1.431	1.413	46.4	32.2	16.986	0.275	4.927	142.2	12.6	135.1	113.1	1.079
46140.0	46339.8	0.264	129.6	8.6	-3.05	0.847	76.3	0.365	0.773	153.3	460.6	0.491	1.056	-4.23	1.221	111.1	344.8	-10.7	0.450
46339.8	46450.0	0.450	323.7	-18.8	-8.33	1.069	69.3	0.392	0.609	136.1	287.3	0.371D	0.848	8.98	1.640	71.5	349.4	27.0	0.535
5.75	13.81		+/-	21.8	0.0	170.9	0.0	1.451	1.413	58.6	20.9	16.246	0.292	5.283	153.8	12.4	142.5	110.8	1.251
46150.0	46344.8	0.253	135.2	5.6	-3.37	0.838	77.5	0.364	0.767	156.1	461.6	0.488	1.047	-3.97	1.217	111.0	352.5	-10.1	0.447
46344.8	46450.0	0.447	330.5	-14.8	-6.68	1.055	68.9	0.406	0.598	138.6	281.7	0.356D	0.841	7.02	1.631	69.9	353.2	20.2	0.540
5.56	13.97		+/-	21.9	0.0	179.1	0.0	1.475	1.413	68.8	12.2	16.129	0.297	5.266	162.2	12.1	149.5	109.8	1.265
46160.0	46350.5	0.248	141.0	2.5	-3.68	0.828	78.4	0.368	0.761	158.4	463.2	0.481	1.041	-3.65	1.212	111.4	0.8	-9.2	0.450
46350.5	46450.0	0.450	337.7	-12.0	-5.57	1.037	68.5	0.423	0.586	141.5	275.5	0.338D	0.833	5.55	1.620	68.0	357.6	15.0	0.560
5.48	14.54		+/-	22.9	0.0	188.2	0.0	1.500	1.413	78.0	7.0	16.388	0.293	5.036	167.1	11.8	156.0	110.1	1.181
46170.0	46356.5	0.247	147.3	-0.5	-3.94	0.818	79.0	0.376	0.755	160.5	465.2	0.471	1.038	-3.26	1.207	111.9	9.7	-8.0	0.457
46356.5	46450.0	0.457	345.0	-10.0	-4.85	1.016	68.0	0.445	0.571	144.6	269.0	0.317D	0.825	4.41	1.606	65.9	2.2	11.0	0.589
5.47	15.40		+/-	24.5	0.0	197.9	0.0	1.524	1.413	86.6	4.7	16.886	0.283	4.721	169.6	11.5	162.0	111.3	1.054
46180.0	46362.7	0.249	153.9	-3.4	-4.12	0.807	79.4	0.386	0.748	162.2	467.4	0.459	1.036	-2.80	1.202	112.6	18.9	-6.7	0.467
46362.7	46450.0	0.468	352.3	-8.6	-4.39	0.990	67.5	0.470	0.555	148.0	262.2	0.294D	0.816	3.47	1.590	63.6	7.0	7.9	0.626
5.50	16.47	668.9	+/-	26.4	2.8	208.1	0.0	1.549	1.413	96.4	4.4	17.146	0.271	4.875	171.1	11.4	167.6	111.7	0.914
								ARRIVAL DATE = 2446452.0										
46130.0	46336.8	0.299	125.1	11.1	-3.01	0.855	73.5	0.387	0.778	149.4	461.9	0.476	1.079	-4.60	1.224	112.4	339.3	-10.9	0.480
46336.8	46452.0	0.480	318.4	-28.9	-13.20	1.080	69.9	0.375	0.619	133.9	295.5	0.387D	0.851	13.81	1.659	73.7	349.4	43.5	0.552
6.38	14.30	969.2	+/-	26.6	3.9	166.1	0.0	1.437	1.418	43.9	40.6	17.454	0.257	5.088	133.4	12.8	127.6	113.8	0.862
46140.0	46340.3	0.269	130.1	8.4	-3.13	0.847	75.9	0.370	0.773	152.9	461.1	0.487	1.058	-4.27	1.221	111.3	345.4	-10.7	0.456
46340.3	46452.0	0.456	324.2	-23.1	-10.23	1.072	69.8	0.383	0.612	135.6	291.6	0.378D	0.846	10.62	1.653	72.7	350.9	34.3	0.516
5.84	13.27		+/-	23.7	0.0	171.8	0.0	1.454	1.418	54.8	30.2	16.714	0.285	4.878	144.3	12.5	134.9	113.1	1.105
46150.0	46344.6	0.250	134.9	5.7	-3.33	0.838	77.7	0.362	0.768	156.3	461.4	0.490	1.045	-3.94	1.217	110.9	352.1	-10.1	0.444
46344.6	46452.0	0.444	330.4	-18.4	-8.11	1.061	69.5	0.393	0.603	137.6	286.8	0.366D	0.840	8.24	1.646	71.3	354.1	26.3	0.505
5.52	12.94		+/-	22.6	0.0	178.7	0.0	1.474	1.418	65.8	20.8	16.142	0.300	5.095	154.2	12.0	142.2	111.3	1.229
46160.0	46349.5	0.239	139.7	2.9	-3.56	0.829	79.1	0.361	0.762	159.2	462.4	0.487	1.037	-3.58	1.213	110.9	359.6	-9.2	0.441
46349.5	46452.0	0.441	336.8	-14.9	-6.64	1.047	69.2	0.406	0.592	140.0	281.4	0.352D	0.833	6.46	1.637	69.8	358.1	19.8	0.511
5.34	13.11		+/-	22.9	0.0	186.6	0.0	1.495	1.418	75.2	14.0	16.071	0.304	5.028	161.2	11.6	149.2	110.7	1.226
46170.0	46354.8	0.234	144.8	0.2	-3.76	0.819	80.2	0.365	0.756	161.9	463.9	0.480	1.032	-3.16	1.209	111.2	7.6	-8.1	0.443
46354.8	46452.0	0.443	343.5	-12.3	-5.65	1.030	68.9	0.423	0.580	142.8	275.5	0.335D	0.826	5.10	1.626	68.0	2.6	14.7	0.529
5.25	13.64		+/-	24.0	0.0	195.2	0.0	1.518	1.418	83.8	10.1	16.309	0.301	4.804	165.4	11.1	155.7	111.1	1.146
46180.0	46360.5	0.232	150.2	-2.4	-3.91	0.809	81.1	0.371	0.750	164.2	465.7	0.472	1.028	-2.68	1.204	111.7	16.0	-6.7	0.449
46360.5	46452.0	0.449	350.3	-10.4	-4.98	1.009	68.5	0.443	0.567	145.8	269.3	0.316D	0.818	4.01	1.613	66.0	7.3	10.7	0.557
5.22	14.44	85.5	+/-	25.6	0.4	204.4	0.0	1.540	1.418	92.1	8.4	16.702	0.294	4.575	167.8	10.8	161.7	112.1	1.031
46190.0	46366.4	0.231	155.9	-4.7	-3.97	0.799	81.9	0.380	0.743	166.4	467.7	0.461	1.026	-2.15	1.198	112.2	24.6	-5.2	0.457
46366.4	46452.0	0.457	357.0	-9.1	-4.54	0.984	68.2	0.466	0.552	149.0	263.0	0.295D	0.809	3.11	1.599	63.9	12.0	7.6	0.591
5.21	15.43	736.1	+/-	27.6	3.1	214.0	0.0	1.562	1.418	101.4	8.3	16.899	0.283	4.707	169.0	10.7	167.3	112.4	0.903

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
								ARRIVAL DATE = 2446454.0											
46140.0	46341.5	0.281	131.2	8.0	-3.31	0.846	75.1	0.380	0.772	152.2	462.2	0.479	1.065	-4.39	1.220	112.0	346.7	-10.6	0.469
46341.5	46454.0	0.469	325.2	-27.5	-12.40	1.073	70.1	0.377	0.613	135.4	295.2	0.382D	0.843	12.49	1.668	73.6	352.9	42.3	0.514
6.05	13.21	675.9	+/-	26.3	2.8	173.7	0.0	1.459	1.420	52.4	38.1	17.178	0.269	4.897	136.1	12.7	127.3	114.1	0.913
46150.0	46345.0	0.254	135.4	5.5	-3.39	0.838	77.4	0.365	0.767	155.9	461.8	0.487	1.047	-3.98	1.217	111.1	352.7	-10.1	0.448
46345.0	46454.0	0.448	330.8	-22.3	-9.80	1.064	70.0	0.384	0.606	137.1	291.3	0.373D	0.838	9.67	1.663	72.6	355.2	33.4	0.484
5.59	12.34		+/-	24.2	0.0	179.4	0.0	1.476	1.420	62.6	29.1	16.528	0.295	4.764	145.7	12.1	134.6	113.2	1.109
46160.0	46349.1	0.237	139.3	3.0	-3.52	0.829	79.3	0.359	0.762	159.5	462.2	0.489	1.036	-3.56	1.213	110.8	359.2	-9.2	0.438
46349.1	46454.0	0.438	336.6	-18.2	-7.95	1.053	69.8	0.394	0.597	139.1	286.7	0.362D	0.833	7.56	1.655	71.3	358.7	25.7	0.475
5.30	12.08		+/-	23.7	0.0	186.1	0.0	1.494	1.420	72.5	21.6	16.076	0.308	4.876	153.9	11.5	141.8	111.8	1.195
46170.0	46353.8	0.226	143.2	0.6	-3.65	0.820	80.9	0.358	0.757	162.8	463.1	0.486	1.028	-3.11	1.209	110.8	6.3	-8.1	0.435
46353.8	46454.0	0.435	342.6	-15.0	-6.64	1.039	69.6	0.407	0.587	141.4	281.6	0.348D	0.826	5.94	1.647	69.8	2.9	19.4	0.481
5.13	12.25		+/-	24.1	0.0	193.6	0.0	1.513	1.420	81.1	16.4	16.026	0.313	4.780	159.6	10.9	148.6	111.5	1.183
46180.0	46358.7	0.220	147.1	-1.5	-3.75	0.811	82.3	0.361	0.752	165.9	464.5	0.481	1.023	-2.61	1.205	111.0	13.7	-6.7	0.436
46358.7	46454.0	0.436	348.7	-12.7	-5.74	1.023	69.4	0.422	0.576	144.0	276.2	0.333D	0.819	4.70	1.637	68.1	7.3	14.5	0.498
5.03	12.73		+/-	25.3	0.0	201.5	0.0	1.533	1.420	88.9	13.5	16.227	0.311	4.569	163.1	10.3	155.0	112.0	1.111
46190.0	46363.8	0.216	151.0	-3.3	-3.80	0.802	83.7	0.366	0.746	168.9	466.0	0.473	1.019	-2.06	1.201	111.4	21.2	-5.2	0.440
46363.8	46454.0	0.440	354.7	-11.0	-5.13	1.004	69.1	0.439	0.564	146.7	270.7	0.316D	0.812	3.71	1.625	66.4	11.9	10.6	0.521
4.97	13.41	176.8	+/-	26.9	0.8	209.8	0.0	1.553	1.420	96.6	12.4	16.487	0.306	4.432	165.0	10.0	160.8	112.6	1.012
46200.0	46368.9	0.214	154.8	-4.6	-3.76	0.793	85.2	0.372	0.741	171.8	467.5	0.466	1.017	-1.47	1.196	111.8	28.8	-3.7	0.445
46368.9	46454.0	0.446	0.5	-9.8	-4.72	0.983	69.0	0.458	0.551	149.4	265.2	0.299D	0.804	2.89	1.613	64.6	16.2	7.7	0.550
4.94	14.23	738.7	+/-	28.8	3.2	218.1	0.0	1.571	1.420	104.8	12.4	16.617	0.298	4.518	165.9	10.0	166.0	112.7	0.903
								ARRIVAL DATE = 2446456.0											
46150.0	46346.1	0.264	136.6	5.1	-3.54	0.837	76.6	0.374	0.766	155.1	462.7	0.480	1.053	-4.07	1.216	111.7	354.0	-10.1	0.459
46346.1	46456.0	0.459	331.8	-26.4	-11.74	1.065	70.3	0.379	0.606	137.0	295.3	0.377D	0.836	11.32	1.681	73.6	356.6	41.3	0.480
5.76	12.21	529.4	+/-	26.6	2.2	181.1	0.0	1.480	1.420	60.6	36.3	16.946	0.281	4.739	138.1	12.3	126.7	114.2	0.941
46160.0	46349.5	0.240	139.8	2.8	-3.57	0.829	79.0	0.362	0.762	159.2	462.5	0.486	1.037	-3.59	1.213	111.0	359.7	-9.2	0.442
46349.5	46456.0	0.442	337.0	-21.7	-9.47	1.056	70.2	0.386	0.600	138.6	291.4	0.368D	0.831	8.83	1.675	72.5	359.4	32.7	0.454
5.35	11.47		+/-	25.1	0.0	186.7	0.0	1.496	1.420	69.8	28.9	16.411	0.304	4.597	146.4	11.6	133.9	113.4	1.092
46170.0	46353.4	0.224	142.7	0.8	-3.62	0.821	81.1	0.356	0.757	163.1	462.9	0.488	1.027	-3.09	1.210	110.7	5.9	-8.1	0.433
46353.4	46456.0	0.433	342.4	-18.1	-7.85	1.046	70.1	0.395	0.592	140.6	287.1	0.358D	0.826	6.95	1.669	71.3	3.1	25.4	0.447
5.10	11.25		+/-	24.9	0.0	193.0	0.0	1.512	1.420	78.5	23.1	16.043	0.316	4.636	152.9	10.8	140.9	112.4	1.151
46180.0	46357.6	0.213	145.1	-0.9	-3.66	0.813	83.0	0.355	0.753	166.9	463.7	0.486	1.020	-2.56	1.206	110.6	12.3	-6.8	0.429
46357.6	46456.0	0.429	347.7	-15.3	-6.70	1.033	70.0	0.406	0.583	142.7	282.5	0.346D	0.820	5.53	1.661	70.0	7.3	19.4	0.451
4.93	11.39		+/-	25.5	0.0	199.8	0.0	1.529	1.420	86.2	19.3	15.993	0.322	4.527	157.4	10.1	147.4	112.2	1.135
46190.0	46361.8	0.206	147.1	-2.1	-3.67	0.805	85.0	0.356	0.749	170.8	464.7	0.482	1.016	-2.01	1.203	110.8	18.7	-5.3	0.429
46361.8	46456.0	0.429	352.9	-13.3	-5.91	1.019	69.9	0.419	0.573	144.9	277.9	0.333D	0.813	4.43	1.652	68.6	11.5	14.8	0.464
4.83	11.76		+/-	26.6	0.0	206.6	0.0	1.545	1.420	92.9	17.4	16.143	0.322	4.339	160.0	9.5	153.3	112.6	1.076
46200.0	46365.8	0.202	148.1	-2.5	-3.63	0.798	87.2	0.359	0.745	174.9	465.7	0.478	1.013	-1.42	1.200	111.0	24.7	-3.7	0.430
46365.8	46456.0	0.430	357.6	-11.8	-5.38	1.004	69.8	0.431	0.564	147.0	273.6	0.321D	0.807	3.60	1.644	67.2	15.3	11.4	0.481
4.77	12.25	236.3	+/-	28.1	1.1	213.1	0.0	1.560	1.420	99.4	16.9	16.255	0.320	4.280	161.2	9.1	158.3	112.6	0.999
46210.0	46369.1	0.201	147.3	-1.8	-3.53	0.794	89.9	0.362	0.744	179.9	466.3	0.475	1.013	-0.82	1.198	111.1	29.7	-2.1	0.432
46369.1	46456.0	0.432	1.3	-10.9	-5.05	0.991	69.7	0.443	0.556	148.7	270.1	0.310D	0.802	3.03	1.636	66.1	18.3	9.1	0.498
4.76	12.72	625.7	+/-	29.6	2.8	218.4	0.0	1.572	1.420	105.0	17.5	16.304	0.317	4.312	161.3	8.9	162.0	112.3	0.924
46220.0	46369.0	0.211	139.7	2.0	-3.41	0.798	94.7	0.362	0.749	188.4	465.2	0.478	1.021A	-0.23	1.202	111.1	30.2	-0.6	0.432
46369.0	46456.0	0.432	1.2	-10.9	-5.06	0.991	69.7	0.442	0.556	148.7	270.2	0.310D	0.803	3.04	1.636	66.2	18.3	9.2	0.497
4.90	12.72	859.7	+/-	30.6	3.8	218.3	0.0	1.571	1.420	105.7	20.0	16.304	0.317	4.312	159.2	8.1	161.9	111.1	0.883
								ARRIVAL DATE = 2446458.0											
46160.0	46350.6	0.249	141.2	2.4	-3.70	0.828	78.3	0.369	0.761	158.3	463.3	0.480	1.042	-3.66	1.212	111.4	1.0	-9.2	0.451
46350.6	46458.0	0.451	338.0	-25.5	-11.22	1.057	70.5	0.381	0.600	138.6	295.7	0.371D	0.829	10.28	1.697	73.6	0.3	40.4	0.448
5.50	11.29	504.3	+/-	27.2	2.2	188.4	0.0	1.500	1.418	68.3	35.4	16.747	0.291	4.605	139.5	11.8	125.9	114.1	0.946
46170.0	46353.8	0.227	143.3	0.6	-3.66	0.820	80.8	0.358	0.757	162.7	463.2	0.486	1.028	-3.11	1.209	110.8	6.4	-8.1	0.436
46353.8	46458.0	0.436	342.8	-21.4	-9.25	1.049	70.5	0.388	0.594	140.2	292.2	0.363D	0.824	8.11	1.692	72.6	3.5	32.3	0.426
5.14	10.65		+/-	26.3	0.0	193.7	0.0	1.514	1.418	76.2	29.5	16.357	0.312	4.392	146.2	10.9	132.7	113.7	1.059
46180.0	46357.3	0.211	144.6	-0.7	-3.64	0.813	83.2	0.353	0.753	167.2	463.5	0.487	1.020	-2.55	1.206	110.5	11.9	-6.8	0.427
46357.3	46458.0	0.427	347.5	-18.2	-7.84	1.039	70.5	0.396	0.587	141.9	288.3	0.354D	0.819	6.47	1.686	71.5	7.2	25.5	0.418
4.91	10.44		+/-	26.4	0.0	199.3	0.0	1.528	1.418	83.8	25.3	16.047	0.325	4.384	151.3	10.0	139.3	112.9	1.098
46190.0	46360.7	0.201	144.9	-1.4	-3.61	0.806	85.6	0.352	0.750	171.9	464.1	0.486	1.014	-1.98	1.204	110.5	17.3	-5.3	0.423
46360.7	46458.0	0.423	351.9	-15.9	-6.87	1.028	70.4	0.405	0.579	143.6	284.5	0.345D	0.814	5.27	1.679	70.4	11.0	20.2	0.421
4.76	10.52		+/-	27.1	0.0	204.9	0.0	1.541	1.418	90.2	22.9	15.991	0.331	4.273	154.4	9.3	145.2	112.7	1.083
46200.0	46363.7	0.196	143.6	-1.0	-3.54	0.801	88.4	0.352	0.748	177.1	464.5	0.485	1.012	-1.39	1.202	110.5	22.0	-3.7	0.421
46363.7	46458.0	0.421	355.5	-14.3	-6.24	1.018	70.4	0.413	0.573	145.2	281.2	0.336D	0.809	4.43	1.673	69.5	14.3	16.4	0.428
4.69	10.72	51.5	+/-	28.1	0.2	209.8	0.0	1.553	1.418	95.3	22.1	16.050	0.334	4.148	155.9	8.6	149.8	112.6	1.039
46210.0	46365.3	0.199	138.9	1.2	-3.45	0.801	92.1	0.352	0.750	183.9	464.2	0.486	1.014A	-0.80	1.203	110.5	24.7	-2.1	0.421
46365.3	46458.0	0.421	357.4	-13.6	-5.97	1.012	70.4	0.417	0.569	146.0	279.5	0.332D	0.807	4.05	1.670	68.9	16.0	14.7	0.433
4.72	10.87	303.1	+/-	29.3	1.4	212.3	0.0	1.558	1.418	98.5	23.2	16.043	0.334	4.143	155.4	7.9	152.0	111.8	0.986
46220.0	46360.2	0.233	123.7	7.8	-3.36	0.819	99.3	0.354	0.769	197.9	460.4	0.497	1.041A	-0.23	1.217	110.4	18.3	-0.6	0.423
46360.2	46458.0	0.423	351.2	-16.2	-7.00	1.030	70.4	0.403	0.581	143.4	285.1	0.347D	0.815	5.44	1.680	70.6	10.4	21.0	0.420
5.23	10.49	714.4	+/-	30.9	3.2	204.0	0.0	1.539	1.418	91.8	30.5	16.099	0.330	4.179	148.3	5.7	144.3	109.0	0.908

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
								ARRIVAL DATE = 2446460.0											
46100.0	46315.3	0.276	98.8	21.8	-0.44	0.882	74.8	0.345	0.800	145.7	453.6	0.524	1.076	-3.65	1.236	109.4	308.7	-10.1	0.424
46315.3	46460.0	0.424	292.2	16.4	6.52	1.122	70.3	0.349	0.658	124.4	345.7	0.429D	0.888	-5.45	1.763	86.3	295.4	-24.5	0.403
5.96	10.01	762.2	+/+	31.1	3.5	131.2	0.0	1.321	1.413	28.6	-58.7	16.103	0.330	4.182	121.3	10.4	71.0	96.5	0.900
46170.0	46354.9	0.235	144.9	0.1	-3.77	0.819	80.1	0.365	0.756	161.8	464.0	0.480	1.032	-3.17	1.209	111.2	7.7	-8.1	0.444
46354.9	46460.0	0.444	343.8	-24.8	-10.84	1.049	70.8	0.384	0.594	140.2	296.7	0.366D	0.822	9.41	1.716	73.7	4.0	40.0	0.419
5.26	10.46	587.2	+/-	28.3	2.5	195.4	0.0	1.518	1.413	75.6	35.4	16.576	0.301	4.491	140.1	11.1	124.5	113.9	0.931
46180.0	46357.8	0.214	145.5	-1.0	-3.68	0.812	82.9	0.356	0.753	166.8	463.9	0.485	1.021	-2.57	1.206	110.7	12.5	-6.8	0.430
46357.8	46460.0	0.430	348.0	-21.3	-9.15	1.041	70.8	0.390	0.589	141.6	293.5	0.359D	0.818	7.54	1.712	72.8	7.3	32.5	0.399
4.95	9.89	172.5	+/-	27.8	0.8	200.1	0.0	1.530	1.413	82.3	30.9	16.255	0.320	4.280	145.3	10.1	130.9	113.6	1.013
46190.0	46360.6	0.201	144.6	-1.3	-3.60	0.806	85.7	0.351	0.750	172.0	464.0	0.487	1.014	-1.98	1.204	110.4	17.1	-5.3	0.422
46360.6	46460.0	0.422	351.8	-18.7	-7.98	1.033	70.8	0.396	0.583	143.0	290.4	0.352D	0.813	6.18	1.707	71.9	10.7	26.5	0.391
4.76	9.67	60.0	+/-	28.1	0.3	204.7	0.0	1.541	1.413	88.3	28.1	16.072	0.332	4.162	148.9	9.2	136.6	113.1	1.037
46200.0	46362.9	0.194	141.7	-0.4	-3.51	0.803	88.9	0.349	0.749	177.9	464.0	0.488	1.011	-1.38	1.203	110.3	20.9	-3.7	0.418
46362.9	46460.0	0.418	354.7	-17.0	-7.26	1.026	70.8	0.401	0.578	144.2	287.8	0.346D	0.810	5.31	1.703	71.2	13.5	22.4	0.391
4.67	9.66	141.7	+/-	28.9	0.7	208.4	0.0	1.550	1.413	92.9	27.2	15.977	0.339	4.102	150.5	8.4	141.0	112.5	1.019
46210.0	46363.7	0.199	135.5	2.4	-3.41	0.804	93.0	0.349	0.753	185.6	463.4	0.490	1.015A	-0.79	1.205	110.3	22.5	-2.2	0.417
46363.7	46460.0	0.417	355.7	-16.5	-7.04	1.023	70.8	0.403	0.576	144.6	287.0	0.344D	0.809	5.04	1.701	71.0	14.5	21.1	0.392
4.73	9.68	366.6	+/-	30.0	1.7	209.7	0.0	1.553	1.413	95.1	28.6	15.953	0.340	4.086	149.7	7.5	142.4	111.4	0.973
								ARRIVAL DATE = 2446462.0											
46100.0	46315.8	0.281	99.1	21.7	-0.50	0.882	74.4	0.350	0.800	145.5	454.1	0.520	1.079	-3.69	1.236	109.7	309.2	-10.0	0.429
46315.8	46462.0	0.429	293.0	14.2	5.75	1.121	69.8	0.358	0.657	124.8	351.9	0.422D	0.892	-4.96	1.790	87.9	292.4	-21.2	0.427
6.05	10.70	444.3	+/+	29.1	2.0	132.0	0.0	1.324	1.406	29.8	-56.7	16.236	0.321	4.268	123.3	10.4	61.7	96.6	0.958
46180.0	46358.9	0.221	147.5	-1.6	-3.78	0.811	82.1	0.362	0.752	165.7	464.6	0.479	1.024	-2.62	1.205	111.1	14.0	-6.7	0.438
46358.9	46462.0	0.438	349.2	-24.5	-10.62	1.041	71.1	0.386	0.589	141.8	298.3	0.361D	0.816	8.72	1.740	74.0	7.5	40.1	0.393
5.06	9.72	770.4	+/-	29.7	3.4	202.0	0.0	1.534	1.406	82.3	36.0	16.433	0.309	4.397	140.0	10.4	122.5	113.6	0.898
46190.0	46361.3	0.204	146.1	-1.8	-3.64	0.805	85.3	0.354	0.749	171.3	464.4	0.484	1.015	-1.99	1.203	110.6	18.0	-5.3	0.426
46361.3	46462.0	0.426	352.6	-21.6	-9.22	1.034	71.1	0.391	0.584	142.9	295.7	0.356D	0.812	7.17	1.736	73.2	10.6	33.6	0.375
4.80	9.21	468.6	+/-	29.6	2.1	205.8	0.0	1.543	1.406	87.9	33.0	16.154	0.327	4.215	143.8	9.4	128.0	113.1	0.953
46200.0	46363.2	0.195	142.4	-0.6	-3.52	0.802	88.7	0.350	0.749	177.6	464.2	0.487	1.011	-1.39	1.203	110.4	21.3	-3.7	0.419
46363.2	46462.0	0.419	355.1	-19.7	-8.35	1.029	71.2	0.394	0.580	143.9	293.6	0.351D	0.809	6.19	1.733	72.7	13.1	29.0	0.367
4.68	8.99	436.5	+/-	30.1	2.0	208.9	0.0	1.551	1.406	92.2	31.9	16.002	0.337	4.117	145.7	8.5	132.2	112.5	0.960
46210.0	46363.9	0.199	135.8	2.3	-3.41	0.804	92.9	0.349	0.752	185.4	463.4	0.490	1.015A	-0.79	1.205	110.3	22.7	-2.2	0.418
46363.9	46462.0	0.418	355.9	-19.2	-8.10	1.027	71.2	0.396	0.579	144.2	292.9	0.350D	0.808	5.90	1.731	72.5	14.0	27.6	0.366
4.73	8.95	639.7	+/-	31.2	2.9	210.0	0.0	1.553	1.406	94.3	33.0	15.960	0.340	4.091	145.1	7.5	133.6	111.3	0.922
								ARRIVAL DATE = 2446464.0											
46100.0	46316.6	0.289	99.6	21.4	-0.61	0.882	73.9	0.357	0.799	145.1	455.0	0.514	1.084	-3.75	1.236	110.2	310.1	-10.0	0.439
46316.6	46464.0	0.439	294.1	12.2	5.10	1.119	69.1	0.369	0.655	125.4	358.0	0.413D	0.897	-4.64	1.819	89.5	290.9	-18.6	0.462
6.20	11.69	247.4	+/+	27.3	1.1	133.3	0.0	1.329	1.396	31.5	-54.7	16.460	0.308	4.415	125.2	10.5	53.5	96.8	0.997
46110.0	46321.7	0.274	107.3	18.8	-1.20	0.874	75.0	0.351	0.793	147.4	455.5	0.515	1.072	-4.00	1.232	109.9	318.0	-10.8	0.433
46321.7	46464.0	0.433	301.3	14.1	5.80	1.113	69.5	0.364	0.649	126.8	351.2	0.412D	0.885	-5.68	1.815	87.7	296.6	-24.3	0.436
5.93	10.94	697.5	+/+	29.9	3.1	141.5	0.0	1.358	1.396	40.0	-56.6	16.314	0.316	4.319	123.4	11.3	60.1	96.3	0.911
46200.0	46364.3	0.198	144.8	-1.4	-3.56	0.800	88.1	0.354	0.747	176.5	464.8	0.483	1.012	-1.40	1.201	110.6	22.7	-3.7	0.424
46364.3	46464.0	0.424	356.3	-22.4	-9.53	1.028	71.5	0.391	0.580	144.1	298.8	0.353D	0.807	7.11	1.764	73.9	12.9	36.1	0.356
4.71	8.67	891.5	+/-	31.7	4.0	210.7	0.0	1.555	1.396	92.7	35.9	16.102	0.330	4.181	141.4	8.8	123.6	112.3	0.878
46210.0	46322.4	0.362	82.7	18.5	-1.98	0.924	110.8	0.377	0.892	229.6	440.3	0.556	1.228A	-1.54	1.288	109.3	327.1	-4.3	0.432
46322.4	46464.0	0.432	302.3	14.4	5.92	1.112	69.6	0.364	0.648	127.0	350.2	0.412D	0.883	-5.85	1.814	87.4	297.4	-25.3	0.433
7.62	10.86	921.9	+/+	30.9	4.1	142.7	0.0	1.362	1.396	43.5	-37.7	16.303	0.317	4.312	142.1	6.2	61.1	97.3	0.872
								ARRIVAL DATE = 2446466.0											
46100.0	46317.6	0.301	100.3	21.0	-0.76	0.881	73.1	0.367	0.799	144.6	456.3	0.506	1.091	-3.85	1.235	110.8	311.2	-9.9	0.452
46317.6	46466.0	0.452	295.5	10.4	4.51	1.116	68.2	0.383	0.653	126.2	364.3	0.403	0.903	-4.42	1.852	91.2	290.8	-16.4	0.505
6.41	12.93	136.7	+/+	25.6	0.6	135.0	0.0	1.335	1.384	33.5	-52.7	16.774	0.290	4.623	127.3	10.6	46.3	96.9	1.020
46110.0	46322.5	0.282	107.9	18.4	-1.32	0.874	74.4	0.358	0.793	147.0	456.4	0.508	1.077	-4.08	1.232	110.4	318.9	-10.7	0.442
46322.5	46466.0	0.442	302.5	11.7	4.99	1.110	68.8	0.376	0.646	127.4	357.6	0.403D	0.890	-5.22	1.848	89.4	295.6	-21.0	0.470
6.08	11.93	432.1	+/+	27.7	1.9	142.8	0.0	1.362	1.384	41.6	-54.3	16.542	0.303	4.468	125.7	11.4	51.9	96.5	0.960
46120.0	46327.5	0.267	115.0	15.6	-1.84	0.866	75.6	0.353	0.787	149.5	456.9	0.509	1.064	-4.18	1.229	110.1	326.6	-11.1	0.435
46327.5	46466.0	0.436	309.4	13.6	5.71	1.104	69.3	0.372	0.640	128.9	351.0	0.402D	0.878	-6.26	1.843	87.6	300.9	-26.9	0.444
5.81	11.18	818.3	+/+	30.1	3.6	150.9	0.0	1.389	1.384	49.4	-55.7	16.382	0.312	4.364	124.3	11.9	58.4	96.4	0.890
								ARRIVAL DATE = 2446468.0											
46100.0	46318.9	0.315	100.9	20.5	-0.95	0.881	72.2	0.379	0.798	144.0	457.7	0.495	1.101	-3.98	1.235	111.6	312.5	-9.8	0.469
46318.9	46468.0	0.469	297.1	8.6	3.94	1.113	67.2	0.399	0.650	127.2	370.8	0.390	0.909	-4.27	1.887	93.1	292.0	-14.6	0.555
6.68	14.40	91.3	+/+	23.9	0.4	137.0	0.0	1.342	1.368	35.8	-50.6	17.176	0.270	4.896	129.4	10.8	39.8	97.1	1.030
46110.0	46323.6	0.294	108.7	18.0	-1.49	0.873	73.6	0.369	0.792	146.4	457.6	0.500	1.084	-4.19	1.232	111.0	320.1	-10.6	0.456
46323.6	46468.0	0.456	304.0	9.6	4.26	1.108	67.9	0.391	0.644	128.2	364.2	0.392	0.895	-4.90	1.883	91.2	296.1	-18.3	0.513
6.29	13.17	277.3	+/+	25.8	1.2	144.6	0.0	1.368	1.368	43.6	-51.8	16.865	0.285	4.684	128.2	11.5	44.7	96.8	0.990
46120.0	46328.4	0.276	115.7	15.3	-1.98	0.865	75.0	0.360	0.786	149.0	457.8	0.503	1.069	-4.26	1.229	110.6	327.6	-11.1	0.445
46328.4	46468.0	0.446	310.7	10.9	4.73	1.101	68.5	0.385	0.637	129.5	357.8	0.392D	0.883	-5.66	1.879	89.4	300.6	-22.8	0.478
5.96	12.15	494.2	+/+	27.7	2.1	152.3	0.0	1.394	1.368	51.0	-52.8	16.617	0.298	4.518	127.2	12.0	50.3	96.8	0.948
46130.0	46333.2	0.260	122.0	12.3	-2.41	0.857	76.3	0.355	0.780	151.7	458.3	0.503	1.057	-4.22	1.225	110.3	335.1	-11.1	0.438
46333.2	46468.0	0.438	317.3	12.8	5.43	1.094	69.1	0.380	0.631	130.9	351.5	0.391D	0.871	-6.65	1.875	87.7	305.6	-28.7	0.452
5.69	11.39	790.6	+/+	29.8	3.5	160.1	0.0	1.419	1.368	58.1	-53.8	16.434	0.309	4.398	126.2	12.2	56.5	97.1	0.894

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL R A LEG	DECL I 1 V 1 KAPPA	I 1 V 1 DELK	V 1 PSI 1 RAS	PSI 1 ECCEN DECLS	ECCEN SMA CDIST1	SMA THET1 THET2 CDIST2	THET1 THET2 RAP	THET2 PERIH DECLP	PERIH APHEL VP	APHEL I 2 -A	I 2 V 2 E	V 2 PSI 2 INCL	PSI 2 R A LAM1	R A DECL LAM2	DECL SPEED ETA	SPEED PERIC
									ARRIVAL DATE = 2446470.0										
46100.0	46320.3	0.333	101.7	20.1	-1.18	0.880	71.0	0.395	0.797	143.5	459.5	0.482	1.112	-4.14	1.235	112.6	313.9	-9.7	0.489
46320.3	46470.0	0.490	298.9	7.0	3.36	1.110	66.1	0.419	0.646	128.3	377.6	0.376	0.917	-4.17	1.925	95.2	294.2	-13.1	0.613
7.03	16.09	104.8	+/+	22.4	0.4	139.3	0.0	1.350	1.348	38.2	-48.2	17.681	0.247	5.247	131.7	11.1	34.0	97.3	1.026
46110.0	46324.9	0.309	109.5	17.6	-1.71	0.873	72.6	0.382	0.791	145.8	459.1	0.489	1.093	-4.33	1.232	111.9	321.5	-10.5	0.473
46324.9	46470.0	0.473	305.7	7.7	3.56	1.104	56.9	0.408	0.640	129.2	371.1	0.379	0.902	-4.67	1.921	93.2	297.9	-16.1	0.564
6.58	14.64	205.0	+/+	24.1	0.8	146.8	0.0	1.376	1.348	45.9	-49.3	17.282	0.265	4.969	130.7	11.8	38.3	97.1	1.005
46120.0	46329.6	0.289	116.6	14.8	-2.17	0.865	74.1	0.371	0.785	148.3	459.0	0.494	1.077	-4.38	1.228	111.3	328.9	-11.0	0.459
46329.6	46470.0	0.460	312.3	8.6	3.87	1.098	67.6	0.400	0.634	130.3	364.7	0.380	0.888	-5.24	1.917	91.3	301.8	-19.6	0.520
6.19	13.39	306.5	+/+	25.6	1.3	154.3	0.0	1.400	1.348	53.0	-49.9	16.952	0.281	4.743	130.0	12.2	43.1	97.2	0.984
46130.0	46334.1	0.270	122.9	11.9	-2.56	0.856	75.6	0.363	0.780	151.1	459.2	0.497	1.062	-4.31	1.225	110.8	336.3	-11.1	0.448
46334.1	46470.0	0.448	318.7	9.8	4.30	1.091	68.3	0.394	0.628	131.6	358.6	0.381D	0.875	-5.92	1.913	89.6	306.0	-24.0	0.484
5.86	12.34	430.7	+/+	27.2	1.8	161.7	0.0	1.424	1.348	59.7	-50.3	16.681	0.295	4.561	129.7	12.3	48.4	97.6	0.960
46140.0	46338.7	0.253	128.4	9.0	-2.89	0.848	77.1	0.357	0.774	154.1	459.6	0.498	1.050	-4.13	1.221	110.5	343.5	-10.8	0.439
46338.7	46470.0	0.439	325.0	11.4	4.94	1.084	68.8	0.389	0.622	133.0	352.6	0.380D	0.864	-6.79	1.909	87.9	310.6	-29.6	0.457
5.57	11.55	616.3	+/+	28.9	2.7	169.1	0.0	1.446	1.348	66.0	-50.7	16.468	0.307	4.420	129.3	12.2	54.4	98.3	0.925
46150.0	46343.4	0.240	133.4	6.1	-3.17	0.839	78.5	0.353	0.769	157.2	460.4	0.497	1.040	-3.86	1.218	110.4	350.7	-10.2	0.433
46343.4	46470.0	0.434	331.1	13.9	5.94	1.076	69.4	0.386	0.615	134.7	346.6	0.378D	0.852	-8.03	1.904	86.3	315.8	-36.9	0.442
5.35	11.12	961.1	+/+	31.0	4.3	176.7	0.0	1.468	1.348	72.0	-51.5	16.332	0.315	4.331	128.5	11.8	61.4	99.1	0.866
46220.0	46344.7	0.302	104.5	13.8	-3.24	0.866	106.4	0.365	0.818	214.5	451.9	0.520	1.117A	-0.27	1.250	110.2	357.4	-0.7	0.433
46344.7	46470.0	0.433	332.8	14.9	6.33	1.074	69.5	0.385	0.613	135.1	345.0	0.377D	0.849	-8.48	1.903	85.8	317.3	-39.4	0.441
6.43	11.09	477.1	+/+	28.9	2.1	178.9	0.0	1.474	1.348	71.9	-32.8	16.317	0.316	4.321	146.4	1.7	63.5	104.2	0.952
									ARRIVAL DATE = 2446472.0										
46100.0	46321.9	0.354	102.4	19.6	-1.46	0.879	69.6	0.414	0.796	143.0	461.5	0.467	1.126	-4.35	1.235	113.8	315.5	-9.6	0.514
46321.9	46472.0	0.515	300.8	5.4	2.75	1.106	64.7	0.441	0.642	129.6	384.9	0.359	0.926	-4.12	1.965	97.5	297.3	-11.9	0.679
7.46	18.01	172.1	+/+	20.9	0.6	141.8	0.0	1.359	1.325	40.8	-45.8	18.299	0.224	5.692	134.1	11.5	28.6	97.7	1.011
46110.0	46326.4	0.328	110.3	17.1	-1.97	0.872	71.3	0.398	0.790	145.1	460.9	0.476	1.105	-4.52	1.231	112.9	323.1	-10.4	0.494
46326.4	46472.0	0.495	307.6	5.8	2.88	1.100	65.7	0.429	0.637	130.3	378.2	0.364	0.909	-4.50	1.961	95.4	300.7	-14.3	0.621
6.94	16.33	204.6	+/+	22.4	0.8	149.2	0.0	1.384	1.325	48.3	-46.6	17.805	0.242	5.336	133.3	12.1	32.5	97.5	1.005
46120.0	46331.0	0.305	117.5	14.4	-2.41	0.864	73.0	0.385	0.784	147.5	460.5	0.483	1.086	-4.54	1.228	112.1	330.5	-10.9	0.477
46331.0	46472.0	0.478	314.1	6.4	3.06	1.094	66.5	0.418	0.631	131.3	371.9	0.367	0.894	-4.92	1.957	93.5	304.1	-17.1	0.571
6.49	14.85	220.4	+/+	23.8	0.9	156.5	0.0	1.407	1.325	55.3	-46.9	17.386	0.260	5.041	133.0	12.4	36.7	97.7	1.002
46130.0	46335.4	0.283	124.0	11.5	-2.76	0.856	74.6	0.374	0.779	150.3	460.5	0.487	1.070	-4.44	1.224	111.5	337.7	-11.0	0.463
46335.4	46472.0	0.463	320.4	7.2	3.32	1.087	67.3	0.410	0.625	132.4	365.8	0.369	0.881	-5.40	1.953	91.7	307.8	-20.4	0.526
6.09	13.56	231.4	+/+	25.0	1.0	163.8	0.0	1.430	1.325	61.8	-46.8	17.031	0.277	4.797	133.1	12.5	41.3	98.2	1.000
46140.0	46339.8	0.264	129.6	8.6	-3.05	0.847	76.3	0.365	0.773	153.3	460.6	0.491	1.056	-4.23	1.221	111.1	344.8	-10.7	0.450
46339.8	46472.0	0.450	326.5	8.2	3.69	1.081	68.0	0.403	0.619	133.7	360.0	0.369D	0.868	-5.97	1.949	90.0	311.8	-24.5	0.489
5.75	12.48	256.4	+/+	26.2	1.1	170.9	0.0	1.451	1.325	67.8	-46.5	16.732	0.292	4.595	133.4	12.4	46.3	99.0	0.995
46150.0	46344.1	0.246	134.3	5.8	-3.27	0.838	78.0	0.358	0.768	156.6	461.0	0.493	1.043	-3.91	1.217	110.7	351.6	-10.2	0.440
46344.1	46472.0	0.440	332.4	9.6	4.21	1.073	68.6	0.398	0.613	135.1	354.4	0.369D	0.857	-6.68	1.945	88.4	316.0	-29.5	0.460
5.45	11.63	323.9	+/+	27.5	1.4	177.9	0.0	1.471	1.325	73.3	-46.2	16.487	0.306	4.432	133.8	12.0	51.9	100.1	0.981
46160.0	46348.4	0.231	138.2	3.3	-3.43	0.830	79.8	0.354	0.763	160.1	461.6	0.493	1.033	-3.51	1.214	110.5	358.3	-9.3	0.432
46348.4	46472.0	0.432	338.0	11.5	4.98	1.066	69.2	0.395	0.607	136.7	349.0	0.367D	0.846	-7.62	1.941	86.9	320.6	-35.7	0.441
5.21	11.09	485.7	+/+	29.0	2.2	184.8	0.0	1.491	1.325	78.5	-46.2	16.300	0.317	4.309	133.8	11.3	58.1	101.2	0.950
46170.0	46352.8	0.219	141.6	1.1	-3.55	0.821	81.5	0.352	0.758	163.7	462.4	0.491	1.025	-3.06	1.210	110.4	5.0	-8.1	0.428
46352.8	46472.0	0.428	343.4	14.6	6.24	1.057	69.8	0.392	0.600	138.3	343.6	0.365D	0.836	-9.06	1.937	85.4	325.7	-43.9	0.438
5.03	11.02	878.1	+/+	31.2	3.9	191.9	0.0	1.509	1.325	83.7	-47.2	16.199	0.324	4.244	132.8	10.7	65.3	102.3	0.880
									ARRIVAL DATE = 2446474.0										
46100.0	46323.6	0.379	103.0	19.1	-1.78	0.879	68.0	0.436	0.795	142.6	463.8	0.449	1.142	-4.60	1.234	115.3	317.0	-9.5	0.544
46323.6	46474.0	0.544	302.8	3.8	2.11	1.102	63.0	0.468	0.638	131.0	392.7	0.340	0.937	-4.10	2.006	100.3	301.3	-10.8	0.753
7.99	20.19	293.1	+/+	19.4	1.0	144.5	0.0	1.368	1.298	43.2	-43.1	19.047	0.200	6.250	136.7	12.1	23.6	98.2	0.984
46110.0	46328.1	0.351	111.2	16.6	-2.29	0.871	69.8	0.418	0.789	144.5	462.9	0.460	1.119	-4.75	1.231	114.2	324.7	-10.3	0.520
46328.1	46474.0	0.520	309.6	4.1	2.17	1.096	64.2	0.452	0.632	131.6	385.9	0.347	0.918	-4.38	2.002	98.0	304.4	-12.7	0.687
7.39	18.25	270.2	+/+	20.9	1.0	151.9	0.0	1.392	1.298	50.8	-43.8	18.447	0.219	5.800	136.0	12.5	27.2	98.0	0.990
46120.0	46332.5	0.324	118.5	13.9	-2.70	0.863	71.7	0.402	0.783	146.8	462.3	0.469	1.098	-4.75	1.227	113.2	332.2	-10.8	0.499
46332.5	46474.0	0.500	316.1	4.5	2.27	1.089	65.3	0.439	0.627	132.4	379.5	0.351	0.902	-4.68	1.999	95.9	307.6	-15.0	0.628
6.86	16.53	220.3	+/+	22.1	0.8	159.1	0.0	1.415	1.298	57.7	-43.8	17.929	0.237	5.424	136.0	12.8	30.9	98.2	1.001
46130.0	46336.9	0.300	125.1	11.0	-3.02	0.855	73.5	0.388	0.778	149.4	462.0	0.476	1.080	-4.61	1.224	112.5	339.4	-10.9	0.481
46336.9	46474.0	0.482	322.4	5.0	2.42	1.083	66.2	0.429	0.621	133.4	373.4	0.355	0.887	-5.00	1.995	94.0	310.9	-17.5	0.576
6.40	15.00	151.8	+/+	23.2	0.6	166.2	0.0	1.437	1.298	64.1	-43.3	17.485	0.256	5.110	136.5	12.8	34.9	98.8	1.016
46140.0	46341.2	0.278	130.9	8.1	-3.27	0.846	75.3	0.377	0.772	152.4	461.9	0.481	1.063	-4.36	1.220	111.8	346.4	-10.7	0.466
46341.2	46474.0	0.466	328.4	5.6	2.62	1.076	67.0	0.420	0.615	134.6	367.6	0.357	0.873	-5.37	1.991	92.3	314.4	-20.6	0.530
6.00	13.67	76.9	+/+	24.1	0.3	173.2	0.0	1.458	1.298	69.9	-42.4	17.102	0.273	4.845	137.4	12.6	39.2	99.8	1.033
46150.0	46345.4	0.258	135.8	5.4	-3.44	0.837	77.1	0.368	0.767	155.7	462.1	0.485	1.049	-4.01	1.217	111.3	353.1	-10.1	0.452
46345.4	46474.0	0.452	334.2	6.3	2.89	1.069	67.8	0.413	0.609	135.9	362.1	0.358	0.861	-5.80	1.987	90.6	318.0	-24.1	0.491
5.64	12.54	10.3	+/+	25.0	0.0	179.9	0.0	1.477	1.298	75.3	-41.3	16.774	0.290	4.623	138.7	12.2	43.9	101.0	1.048
46160.0	46349.4	0.239	139.6	2.9	-3.55	0.829	79.1	0.360	0.762	159.3	462.3	0.487	1.037	-3.57	1.213	110.9	359.5	-9.2	0.440
46349.4	46474.0	0.440	339.5	7.3	3.27	1.062	68.4	0.408	0.604	137.2	357.0	0.358D	0.850	-6.31	1.984	89.1	321.9	-28.3	0.460
5.33	11.64		+/+	25.9	0.0	186.4	0.0	1.495	1.298	80.3	-40.0	16.476	0.305	4.460	140.0	11.5	48.9	102.3	1.057
46170.0	46353.2	0.222	142.2	0.9	-3.59	0.821	81.3	0.354	0.758	163.4	462.7	0.489	1.026	-3.08	1.210	110.6	5.5	-8.1	0.431
46353.2	46474.0	0.431	344.4	8.7	3.77	1.055	69.0	0.404	0.598	138.6	352.3	0.357D	0.840	-6.94	1.980	87.8	325.9	-33.1	0.437
5.07	10.98		+/+	26.9	0.0	192.6	0.0	1.511	1.298	84.8	-38.9	16.253	0.319	4.304	141.1	10.7	54.2	103.8	1.055

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
46180.0	46356.7	0.208	143.4	-0.4	-3.59	0.814	83.6	0.350	0.754	167.8	463.1	0.490	1.018	-2.53	1.207	110.3	11.1	-6.8	0.423
46356.7	46474.0	0.423	348.9	10.4	4.46	1.048	69.6	0.401	0.593	140.0	348.0	0.355D	0.831	-7.74	1.976	86.6	330.0	-38.8	0.424
4.86	10.61	63.2	+/+	28.0	0.3	198.3	0.0	1.525	1.298	88.8	-38.1	16.095	0.330	4.177	141.8	9.9	59.7	105.2	1.036
46190.0	46359.9	0.198	143.1	-0.8	-3.56	0.807	86.1	0.348	0.751	172.7	463.6	0.490	1.013	-1.96	1.205	110.2	16.2	-5.3	0.419
46359.9	46474.0	0.419	352.8	12.7	5.42	1.041	70.1	0.399	0.589	141.3	344.1	0.354D	0.823	-8.79	1.973	85.5	334.0	-45.1	0.424
4.72	10.61	269.9	+/+	29.4	1.2	203.5	0.0	1.538	1.298	92.4	-38.1	15.990	0.338	4.110	141.7	9.1	65.4	106.5	0.993
46200.0	46363.2	0.195	142.2	-0.6	-3.52	0.802	88.8	0.350	0.749	177.7	464.2	0.487	1.011	-1.38	1.203	110.4	21.2	-3.7	0.419
46363.2	46474.0	0.419	356.4	16.4	6.97	1.034	70.6	0.397	0.584	142.7	340.3	0.352D	0.816	-10.44	1.969	84.4	338.2	-53.2	0.444
4.67	11.17	766.7	+/+	31.7	3.5	208.8	0.0	1.550	1.298	95.9	-39.8	15.993	0.337	4.111	139.7	8.5	71.5	107.4	0.899
46220.0	46356.8	0.245	118.6	9.5	-3.33	0.828	101.0	0.354	0.778	201.6	458.6	0.503	1.053A	-0.23	1.224	110.3	13.7	-0.6	0.423
46356.8	46474.0	0.423	349.1	10.5	4.50	1.047	69.6	0.401	0.593	140.0	347.8	0.355D	0.831	-7.78	1.976	86.5	330.1	-39.0	0.424
5.43	10.61		+/+	26.9	0.0	198.5	0.0	1.526	1.298	89.2	-24.5	15.975	0.331	4.296	154.9	4.8	60.0	107.5	1.090
							ARRIVAL DATE = 2446476.0												
46100.0	46325.4	0.410	103.5	18.6	-2.18	0.878	66.0	0.462	0.795	142.4	466.5	0.427	1.162	-4.91	1.234	117.0	318.6	-9.3	0.580
46325.4	46476.0	0.580	304.8	2.4	1.42	1.097	61.1	0.498	0.634	132.7	401.1	0.318	0.949	-4.13	2.048	103.4	306.1	-9.9	0.836
8.64	22.65	468.6	+/+	18.1	1.6	147.5	0.0	1.378	1.267	45.7	-40.3	19.957	0.176	6.959	139.4	12.8	18.9	98.9	0.945
46110.0	46329.8	0.377	111.9	16.1	-2.66	0.870	68.1	0.441	0.789	144.0	465.3	0.441	1.136	-5.04	1.230	115.7	326.4	-10.2	0.551
46329.8	46476.0	0.551	311.7	2.5	1.44	1.091	62.5	0.479	0.628	133.0	394.2	0.327	0.929	-4.31	2.044	100.9	309.0	-11.4	0.761
7.94	20.42	400.2	+/+	19.4	1.4	154.7	0.0	1.402	1.267	53.2	-40.8	19.223	0.195	6.385	138.8	13.1	22.2	98.7	0.961
46120.0	46334.3	0.348	119.5	13.4	-3.04	0.862	70.1	0.422	0.782	146.1	464.4	0.452	1.113	-5.00	1.227	114.5	333.9	-10.7	0.526
46334.3	46476.0	0.526	318.2	2.7	1.48	1.084	63.8	0.463	0.622	133.7	387.7	0.334	0.910	-4.50	2.041	98.7	312.0	-13.2	0.693
7.33	18.43	298.7	+/+	20.6	1.1	161.9	0.0	1.424	1.267	60.2	-40.6	18.593	0.214	5.909	139.1	13.3	25.6	98.9	0.984
46130.0	46338.6	0.321	126.3	10.5	-3.33	0.854	72.0	0.406	0.777	148.5	463.8	0.461	1.092	-4.83	1.223	113.6	341.2	-10.8	0.504
46338.6	46476.0	0.505	324.5	3.0	1.55	1.078	64.9	0.450	0.616	134.6	381.5	0.339	0.894	-4.70	2.037	96.6	315.0	-15.2	0.633
6.80	16.66	172.1	+/+	21.6	0.7	169.0	0.0	1.446	1.267	66.5	-39.7	18.048	0.233	5.510	139.9	13.2	29.1	99.5	1.011
46140.0	46342.8	0.296	132.3	7.6	-3.54	0.845	74.0	0.392	0.771	151.3	463.5	0.469	1.073	-4.54	1.219	112.8	348.2	-10.6	0.485
46342.8	46476.0	0.485	330.6	3.3	1.64	1.071	65.9	0.439	0.611	135.6	375.6	0.343	0.879	-4.91	2.033	94.8	318.2	-17.4	0.579
6.32	15.08	31.2	+/+	22.4	0.1	175.8	0.0	1.466	1.267	72.3	-38.4	17.575	0.252	5.173	141.4	13.0	32.9	100.6	1.043
46150.0	46346.9	0.273	137.5	4.9	-3.67	0.836	76.0	0.381	0.766	154.5	463.5	0.474	1.057	-4.15	1.216	112.1	355.0	-10.0	0.468
46346.9	46476.0	0.468	336.2	3.7	1.77	1.064	66.8	0.430	0.605	136.8	370.1	0.345	0.866	-5.15	2.030	93.0	321.5	-20.0	0.532
5.90	13.71		+/+	23.2	0.0	182.5	0.0	1.484	1.267	77.9	-36.5	17.095	0.270	4.984	143.3	12.5	36.8	101.7	1.076
46160.0	46350.8	0.251	141.5	2.4	-3.73	0.828	78.1	0.371	0.761	158.1	463.5	0.479	1.043	-3.68	1.212	111.5	1.3	-9.2	0.453
46350.8	46476.0	0.454	341.5	4.2	1.95	1.057	67.6	0.423	0.600	138.0	365.0	0.346	0.854	-5.42	2.026	91.5	324.8	-22.9	0.491
5.54	12.54		+/+	23.8	0.0	188.8	0.0	1.501	1.267	83.1	-34.3	16.656	0.288	4.846	145.6	11.8	41.0	102.9	1.107
46170.0	46354.5	0.232	144.3	0.3	-3.73	0.820	80.4	0.363	0.756	162.2	463.7	0.482	1.031	-3.15	1.209	111.1	7.2	-8.1	0.441
46354.5	46476.0	0.441	346.4	4.8	2.17	1.050	68.3	0.418	0.595	139.3	360.4	0.347	0.843	-5.72	2.023	90.1	328.3	-26.1	0.458
5.22	11.57		+/+	24.5	0.0	194.8	0.0	1.516	1.267	87.8	-31.9	16.281	0.305	4.722	148.0	11.0	45.3	104.3	1.134
46180.0	46357.8	0.214	145.5	-1.0	-3.68	0.812	82.9	0.356	0.753	166.7	463.9	0.485	1.021	-2.57	1.206	110.7	12.5	-6.8	0.430
46357.8	46476.0	0.430	350.6	5.5	2.44	1.043	68.9	0.413	0.590	140.5	356.3	0.346D	0.834	-6.07	2.019	88.9	331.7	-29.6	0.432
4.95	10.83		+/+	25.1	0.0	200.1	0.0	1.530	1.267	91.9	-29.5	15.977	0.320	4.606	150.5	10.1	49.6	105.8	1.154
46190.0	46360.5	0.200	144.4	-1.3	-3.59	0.807	85.8	0.351	0.750	172.1	463.9	0.487	1.014	-1.98	1.204	110.4	17.0	-5.3	0.422
46360.5	46476.0	0.422	354.1	6.3	2.74	1.038	69.4	0.410	0.586	141.6	353.0	0.346D	0.827	-6.43	2.017	88.0	334.8	-33.0	0.414
4.75	10.32		+/+	25.7	0.0	204.5	0.0	1.540	1.267	95.3	-27.1	15.751	0.333	4.503	152.9	9.2	53.6	107.1	1.165
46200.0	46362.5	0.194	140.7	-0.0	-3.49	0.803	89.2	0.348	0.750	178.4	463.8	0.489	1.011	-1.38	1.204	110.2	20.2	-3.7	0.416
46362.5	46476.0	0.417	356.4	7.0	3.01	1.033	69.8	0.408	0.584	142.4	350.7	0.345D	0.822	-6.75	2.015	87.3	337.2	-35.8	0.404
4.65	10.04		+/+	26.1	0.0	207.7	0.0	1.548	1.267	97.6	-24.5	15.610	0.341	4.429	155.4	8.3	56.6	108.2	1.171
46210.0	46362.9	0.199	133.7	3.0	-3.39	0.806	93.4	0.347	0.754	186.5	462.9	0.492	1.016A	-0.79	1.207	110.2	21.4	-2.2	0.415
46362.9	46476.0	0.415	356.9	7.2	3.08	1.033	69.9	0.408	0.583	142.6	350.1	0.345D	0.821	-6.82	2.014	87.1	337.7	-36.4	0.403
4.74	9.99		+/+	26.1	0.0	208.4	0.0	1.549	1.267	98.2	-21.1	15.574	0.343	4.422	158.7	7.3	57.3	108.7	1.175
46220.0	46360.0	0.233	123.4	7.9	-3.36	0.820	99.4	0.354	0.770	198.1	460.4	0.497	1.042A	-0.23	1.218	110.4	18.1	-0.6	0.423
46360.0	46476.0	0.423	353.4	6.2	2.68	1.039	69.3	0.411	0.587	141.4	353.6	0.346D	0.828	-6.36	2.017	88.1	334.3	-32.4	0.417
5.24	10.41		+/+	25.5	0.0	203.7	0.0	1.539	1.267	95.0	-15.5	15.785	0.330	4.530	164.2	5.7	52.9	108.0	1.166
46230.0	46345.4	0.362	108.0	13.9	-3.67	0.890	110.9	0.401	0.850	222.0	451.0	0.509	1.190A	0.45	1.268	112.0	359.0	1.1	0.474
46345.4	46476.0	0.475	334.2	3.5	1.72	1.066	66.4	0.433	0.607	136.3	372.1	0.344	0.871	-5.06	2.031	93.7	320.2	-19.0	0.548
7.63	14.20	458.4	+/+	25.0	1.9	180.0	0.0	1.477	1.267	77.3	-5.7	17.315	0.263	4.992	173.9	1.5	35.3	102.7	0.954
							ARRIVAL DATE = 2446478.0												
46100.0	46327.2	0.445	103.9	18.1	-2.66	0.877	63.7	0.493	0.794	142.3	469.5	0.402	1.186	-5.31	1.234	119.1	320.2	-9.2	0.622
46327.2	46478.0	0.622	306.8	1.0	0.67	1.091	58.8	0.533	0.629	134.5	410.2	0.294	0.964	-4.21	2.089	107.0	311.5	-9.1	0.931
9.44	25.44	701.2	+/+	16.8	2.2	150.5	0.0	1.388	1.231	48.0	-37.4	21.051	0.153	7.856	142.2	13.8	14.5	99.9	0.896
46110.0	46331.7	0.408	112.5	15.7	-3.11	0.869	66.0	0.468	0.788	143.7	467.9	0.419	1.156	-5.39	1.230	117.5	328.1	-10.1	0.587
46331.7	46478.0	0.588	313.8	1.1	0.67	1.085	60.5	0.510	0.623	134.7	403.1	0.305	0.941	-4.30	2.085	104.2	314.3	-10.3	0.844
8.62	22.87	595.6	+/+	18.1	1.9	157.7	0.0	1.411	1.231	55.6	-37.8	20.159	0.172	7.122	141.7	13.9	17.5	99.5	0.919
46120.0	46336.1	0.376	120.4	13.0	-3.46	0.861	68.2	0.446	0.782	145.5	466.8	0.433	1.130	-5.32	1.226	116.1	335.7	-10.5	0.558
46336.1	46478.0	0.558	320.4	1.2	0.68	1.079	62.0	0.491	0.617	135.1	396.4	0.314	0.920	-4.38	2.082	101.8	317.2	-11.7	0.766
7.91	20.57	452.3	+/+	19.2	1.6	164.9	0.0	1.433	1.231	62.6	-37.4	19.396	0.190	6.518	142.1	13.9	20.6	99.7	0.950
46130.0	46340.4	0.345	127.5	10.1	-3.70	0.852	70.4	0.427	0.776	147.7	465.9	0.445	1.106	-5.10	1.222	114.9	343.1	-10.7	0.532
46340.4	46478.0	0.532	326.8	1.3	0.70	1.072	63.4	0.475	0.612	135.8	390.1	0.321	0.902	-4.47	2.078	99.6	320.1	-13.3	0.696
7.28	18.53	282.1	+/+	20.2	1.0	171.9	0.0	1.454	1.231	69.0	-36.2	18.732	0.209	6.013	143.3	13.8	23.7	100.3	0.987
46140.0	46344.6	0.317	133.8	7.2	-3.86	0.844	72.5	0.410	0.770	150.3	465.4	0.454	1.086	-4.76	1.219	113.9	350.2	-10.5	0.509
46344.6	46478.0	0.509	332.8	1.4	0.72	1.065	64.6	0.461	0.606	136.7	384.1	0.327	0.886	-4.56	2.074	97.6	323.0	-14.9	0.634
6.73	16.70	95.6	+/+	21.0	0.4	178.7	0.0	1.474	1.231	74.8	-34.4	18.157	0.229	5.588	145.2	13.5	27.0	101.4	1.028

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN COIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
46150.0	46348.7	0.292	139.2	4.3	-3.94	0.835	74.6	0.396	0.764	153.3	465.1	0.461	1.067	-4.33	1.215	113.1	357.0	-9.9	0.488
46348.7	46478.0	0.489	338.5	1.5	0.77	1.058	65.6	0.450	0.601	137.8	378.6	0.331	0.871	-4.65	2.071	95.7	326.0	-16.8	0.579
6.24	15.09		+/+	21.7	0.0	185.3	0.0	1.492	1.231	80.4	-32.0	17.598	0.248	5.318	147.7	12.9	30.5	102.7	1.072
46160.0	46352.6	0.267	143.7	1.7	-3.96	0.826	76.8	0.384	0.759	156.7	465.0	0.468	1.051	-3.82	1.211	112.4	3.4	-9.1	0.470
46352.6	46478.0	0.471	343.8	1.7	0.82	1.051	66.6	0.440	0.595	138.9	373.4	0.333	0.858	-4.76	2.067	94.1	329.1	-18.8	0.530
5.81	13.68		+/+	22.3	0.0	191.6	0.0	1.509	1.231	85.7	-29.0	17.050	0.267	5.169	150.7	12.3	34.0	103.9	1.115
46170.0	46356.2	0.245	146.9	-0.4	-3.91	0.818	79.2	0.374	0.755	160.7	465.0	0.472	1.037	-3.25	1.208	111.8	9.4	-8.0	0.455
46356.2	46478.0	0.455	348.7	1.9	0.89	1.044	67.4	0.433	0.591	140.1	368.7	0.335	0.846	-4.87	2.064	92.6	332.2	-21.0	0.489
5.43	12.47		+/+	22.9	0.0	197.5	0.0	1.523	1.231	90.5	-25.7	16.575	0.286	5.036	154.0	11.4	37.7	105.3	1.154
46180.0	46359.5	0.225	148.5	-1.9	-3.82	0.810	81.8	0.365	0.751	165.2	465.0	0.477	1.025	-2.64	1.204	111.3	14.7	-6.7	0.442
46359.5	46478.0	0.442	352.9	2.1	0.98	1.037	68.2	0.427	0.586	141.3	364.6	0.336	0.836	-4.99	2.061	91.4	335.3	-23.2	0.454
5.11	11.48		+/+	23.5	0.0	202.8	0.0	1.536	1.231	94.7	-22.2	16.176	0.303	4.911	157.6	10.5	41.2	106.7	1.187
46190.0	46362.2	0.208	148.0	-2.3	-3.70	0.804	84.7	0.358	0.748	170.4	465.0	0.480	1.016	-2.02	1.202	110.9	19.3	-5.3	0.431
46362.2	46478.0	0.431	356.4	2.4	1.07	1.032	68.8	0.423	0.582	142.4	361.2	0.336	0.828	-5.11	2.058	90.4	338.1	-25.4	0.428
4.86	10.71		+/+	24.1	0.0	207.3	0.0	1.547	1.231	98.3	-18.6	15.865	0.319	4.796	161.3	9.6	44.5	108.0	1.210
46200.0	46364.3	0.197	144.7	-1.4	-3.56	0.801	88.1	0.354	0.748	176.5	464.8	0.483	1.012	-1.40	1.201	110.6	22.7	-3.7	0.423
46364.3	46478.0	0.424	358.9	2.6	1.15	1.027	69.2	0.420	0.579	143.2	358.8	0.336D	0.823	-5.22	2.056	89.6	340.3	-27.1	0.410
4.71	10.20		+/+	24.6	0.0	210.6	0.0	1.555	1.231	100.9	-15.0	15.659	0.330	4.697	165.0	8.8	47.1	109.0	1.221
46210.0	46365.1	0.199	138.4	1.4	-3.44	0.801	92.2	0.352	0.750	184.1	464.1	0.486	1.014A	-0.80	1.203	110.5	24.4	-2.1	0.420
46365.1	46478.0	0.421	359.9	2.7	1.19	1.025	69.4	0.419	0.578	143.6	357.8	0.336D	0.820	-5.26	2.055	89.3	341.3	-27.9	0.403
4.72	10.00		+/+	24.9	0.0	211.9	0.0	1.557	1.231	102.1	-11.3	15.597	0.335	4.630	168.7	7.8	48.2	109.4	1.216
46220.0	46363.7	0.222	129.6	5.7	-3.38	0.810	97.6	0.356	0.761	194.1	462.4	0.490	1.031A	-0.23	1.211	110.6	23.1	-0.6	0.425
46363.7	46478.0	0.426	358.2	2.5	1.13	1.028	69.1	0.421	0.580	143.0	359.4	0.336D	0.824	-5.19	2.056	89.8	339.7	-26.7	0.414
5.06	10.33		+/+	25.0	0.0	209.7	0.0	1.553	1.231	100.5	-7.3	15.796	0.327	4.614	172.7	6.7	46.4	109.0	1.182
46230.0	46357.1	0.294	118.8	10.8	-3.52	0.845	105.6	0.378	0.796	209.7	457.6	0.496	1.097A	0.37	1.236	111.5	14.6	0.9	0.452
46357.1	46478.0	0.452	349.8	1.9	0.91	1.042	67.6	0.431	0.589	140.4	367.7	0.335	0.844	-4.90	2.063	92.3	333.0	-21.5	0.480
6.28	12.20		+/+	24.9	0.0	198.9	0.0	1.527	1.231	92.1	-2.3	16.741	0.290	4.642	177.2	4.4	38.6	106.8	1.058

ARRIVAL DATE = 2446480.0

46100.0	46329.1	0.487	104.0	17.7	-3.24	0.877	61.0	0.529	0.793	142.6	472.9	0.373	1.213	-5.80	1.233	121.6	321.6	-9.1	0.672
46329.1	46480.0	0.672	308.8	-0.2	-0.16	1.086	56.1	0.572	0.624	136.7	420.2	0.267	0.981	-4.37	2.126	111.1	317.5	-8.4	1.038
10.42	28.60	991.9	+/+	15.6	2.8	153.6	0.0	1.398	1.190	50.1	-34.5	22.372	0.131	9.002	144.9	15.0	10.5	101.0	0.836
46110.0	46333.6	0.446	112.9	15.3	-3.65	0.869	63.6	0.500	0.787	143.6	470.9	0.394	1.180	-5.84	1.230	119.6	329.7	-9.9	0.631
46333.6	46480.0	0.631	315.9	-0.2	-0.15	1.079	58.2	0.545	0.618	136.5	412.7	0.281	0.955	-4.35	2.123	108.1	320.3	-9.4	0.937
9.45	25.63	855.1	+/+	16.9	2.6	160.8	0.0	1.421	1.190	57.9	-34.9	21.290	0.149	8.058	144.5	14.9	13.1	100.6	0.866
46120.0	46338.0	0.408	121.1	12.6	-3.95	0.860	66.1	0.474	0.781	145.0	469.4	0.411	1.150	-5.71	1.226	117.9	337.5	-10.4	0.595
46338.0	46480.0	0.595	322.6	-0.2	-0.15	1.073	60.0	0.522	0.612	136.7	405.8	0.293	0.932	-4.33	2.119	105.4	323.1	-10.5	0.848
8.61	22.98	679.5	+/+	18.0	2.2	168.0	0.0	1.443	1.190	65.0	-34.3	20.360	0.167	7.284	145.0	14.7	15.9	100.7	0.902
46130.0	46342.3	0.374	128.5	9.7	-4.14	0.851	68.4	0.451	0.775	147.0	468.3	0.425	1.124	-5.43	1.222	116.5	345.0	-10.6	0.564
46342.3	46480.0	0.564	329.0	-0.3	-0.16	1.066	61.6	0.503	0.607	137.2	399.3	0.302	0.912	-4.31	2.116	102.9	325.9	-11.6	0.768
7.88	20.63	475.8	+/+	18.9	1.6	174.9	0.0	1.463	1.190	71.5	-32.9	19.556	0.186	6.643	146.5	14.5	18.7	101.3	0.945
46140.0	46346.5	0.343	135.1	6.7	-4.24	0.842	70.7	0.432	0.769	149.3	467.5	0.437	1.100	-5.04	1.218	115.3	352.2	-10.4	0.537
46346.5	46480.0	0.537	335.2	-0.3	-0.16	1.059	63.0	0.486	0.601	137.9	393.2	0.309	0.893	-4.29	2.112	100.7	328.7	-12.9	0.696
7.23	18.53	256.6	+/+	19.8	0.9	181.8	0.0	1.482	1.190	77.4	-30.6	18.859	0.206	6.108	148.7	14.0	21.7	102.3	0.992
46150.0	46350.6	0.314	140.9	3.8	-4.27	0.833	73.0	0.415	0.763	152.1	466.9	0.446	1.080	-4.55	1.214	114.3	359.1	-9.9	0.512
46350.6	46480.0	0.513	340.9	-0.3	-0.17	1.051	64.3	0.472	0.596	138.9	387.5	0.315	0.877	-4.27	2.109	98.7	331.5	-14.2	0.633
6.66	16.66	37.6	+/+	20.5	0.1	188.4	0.0	1.500	1.190	82.8	-27.8	18.252	0.225	5.658	151.7	13.5	24.7	103.8	1.041
46160.0	46354.5	0.287	145.8	1.2	-4.23	0.824	75.3	0.400	0.758	155.3	466.6	0.454	1.061	-3.99	1.210	113.4	5.7	-9.0	0.491
46354.5	46480.0	0.491	346.3	-0.3	-0.17	1.044	65.4	0.460	0.591	139.9	382.3	0.319	0.862	-4.25	2.105	97.0	334.4	-15.6	0.576
6.16	15.01		+/+	21.2	0.0	194.7	0.0	1.516	1.190	88.1	-24.3	17.622	0.245	5.439	155.2	12.8	27.7	105.1	1.089
46170.0	46358.1	0.262	149.5	-1.1	-4.13	0.816	77.7	0.388	0.753	159.1	466.5	0.461	1.045	-3.38	1.206	112.7	11.7	-8.0	0.473
46358.1	46480.0	0.473	351.1	-0.4	-0.19	1.037	65.5	0.450	0.586	141.1	377.5	0.322	0.850	-4.23	2.102	95.4	337.3	-17.0	0.527
5.71	13.58		+/+	21.9	0.0	200.6	0.0	1.531	1.190	93.0	-20.4	17.057	0.265	5.271	159.1	11.9	30.9	106.5	1.133
46180.0	46361.4	0.239	151.8	-2.8	-4.00	0.808	80.4	0.377	0.749	163.4	466.4	0.466	1.031	-2.73	1.203	112.0	17.2	-6.7	0.456
46361.4	46480.0	0.457	355.5	-0.4	-0.20	1.030	67.4	0.443	0.581	142.2	373.3	0.324	0.839	-4.20	2.099	94.1	340.1	-18.4	0.486
5.33	12.38		+/+	22.6	0.0	206.0	0.0	1.544	1.190	97.3	-16.2	16.582	0.284	5.108	163.4	11.0	33.9	107.9	1.167
46190.0	46364.3	0.219	152.0	-3.6	-3.83	0.801	83.4	0.368	0.746	168.3	466.3	0.471	1.021	-2.08	1.200	111.5	21.9	-5.2	0.443
46364.3	46480.0	0.443	359.1	-0.5	-0.21	1.024	68.1	0.437	0.577	143.3	369.7	0.325	0.830	-4.18	2.096	92.9	342.8	-19.7	0.452
5.02	11.40		+/+	23.3	0.0	210.7	0.0	1.555	1.190	101.1	-11.9	16.208	0.301	4.948	167.8	10.2	36.7	109.1	1.190
46200.0	46366.5	0.204	149.7	-3.0	-3.66	0.797	86.7	0.362	0.744	174.2	466.1	0.475	1.014	-1.43	1.199	111.1	25.7	-3.7	0.433
46366.5	46480.0	0.433	1.8	-0.5	-0.23	1.020	68.7	0.433	0.574	144.2	367.0	0.326	0.823	-4.16	2.094	92.1	345.0	-20.8	0.427
4.80	10.69		+/+	24.1	0.0	214.3	0.0	1.563	1.190	104.0	-7.7	15.951	0.315	4.798	172.0	9.3	39.1	110.0	1.197
46210.0	46367.8	0.200	144.4	-0.7	-3.50	0.796	90.7	0.358	0.746	181.2	465.6	0.479	1.013A	-0.81	1.200	110.9	28.0	-2.1	0.428
46367.8	46480.0	0.428	3.3	-0.5	-0.24	1.017	69.0	0.431	0.573	144.7	365.5	0.326	0.819	-4.15	2.092	91.7	346.3	-21.5	0.414
4.74	10.31		+/+	24.7	0.0	216.3	0.0	1.567	1.190	105.8	-3.7	15.844	0.323	4.672	176.0	8.5	40.4	110.5	1.187
46220.0	46367.4	0.213	136.4	3.2	-3.40	0.802	95.6	0.360	0.753	190.2	464.3	0.482	1.023A	-0.23	1.205	110.9	28.1	-0.6	0.430
46367.4	46480.0	0.430	2.9	-0.5	-0.23	1.018	68.9	0.431	0.573	144.6	366.0	0.326	0.820	-4.15	2.093	91.8	345.9	-21.3	0.418
4.94	10.42		+/+	25.2	0.0	215.7	0.0	1.566	1.190	105.5	-0.2	15.970	0.321	4.588	179.4	7.6	40.0	110.2	1.151
46230.0	46363.8	0.261	127.1	8.1	-3.44	0.822	102.2	0.372	0.774	202.5	461.3	0.486	1.061A	0.35	1.220	111.5	23.8	0.9	0.445
46363.8	46480.0	0.446	358.5	-0.5	-0.21	1.025	68.0	0.438	0.578	143.1	370.3	0.325	0.831	-4.19	2.096	93.1	342.3	-19.5	0.457
5.69	11.56		+/+	25.3	0.0	209.9	0.0	1.553	1.190	101.2	3.0	16.582	0.298	4.561	177.0	6.2	36.3	108.7	1.063

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A R A LEG	DECL DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 PSI 1 DECLS	ECCEN ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
								ARRIVAL DATE = 2446482.0											
46120.0	46339.9	0.446	121.6	12.3	-4.53	0.859	63.6	0.506	0.780	144.9	472.4	0.385	1.174	-6.19	1.225	120.1	339.2	-10.3	0.639
46339.9	46482.0	0.640	324.8	-1.4	-1.03	1.066	57.6	0.558	0.607	138.5	416.0	0.268	0.946	-4.34	2.152	109.4	329.7	-9.4	0.939
9.47	25.69	978.5	+/+	16.9	2.9	171.1	0.0	1.452	1.145	67.3	-31.4	21.515	0.145	8.251	147.7	15.7	11.7	101.8	0.843
46130.0	46344.2	0.408	129.3	9.3	-4.65	0.850	66.2	0.480	0.773	146.4	470.9	0.403	1.144	-5.84	1.221	118.4	346.9	-10.5	0.602
46344.2	46482.0	0.602	331.3	-1.5	-1.02	1.059	59.5	0.534	0.602	138.7	409.2	0.280	0.923	-4.22	2.148	106.7	352.4	-10.3	0.847
8.60	22.97	748.0	+/+	17.9	2.4	178.1	0.0	1.472	1.145	73.9	-29.7	20.540	0.163	7.431	149.4	15.3	14.1	102.3	0.889
46140.0	46348.4	0.372	136.3	6.3	-4.68	0.841	68.7	0.457	0.767	148.5	469.8	0.417	1.118	-5.38	1.217	116.9	354.3	-10.3	0.569
46348.4	46482.0	0.570	337.5	-1.7	-1.02	1.052	61.2	0.514	0.596	139.3	402.9	0.290	0.902	-4.10	2.145	104.3	335.1	-11.2	0.766
7.84	20.56	504.3	+/+	18.7	1.7	184.9	0.0	1.491	1.145	79.9	-27.3	19.696	0.183	6.753	151.9	14.8	16.7	103.3	0.939
46150.0	46352.5	0.340	142.5	3.4	-4.64	0.832	71.1	0.437	0.762	151.0	469.0	0.429	1.094	-4.82	1.213	115.7	1.3	-9.8	0.541
46352.5	46482.0	0.541	343.3	-1.8	-1.04	1.044	62.7	0.497	0.591	140.0	397.1	0.297	0.884	-3.98	2.141	102.1	337.9	-12.1	0.693
7.17	18.42	264.5	+/+	19.5	0.9	191.5	0.0	1.508	1.145	85.4	-24.0	18.964	0.202	6.187	155.1	14.1	19.3	104.7	0.990
46160.0	46356.4	0.310	147.8	0.6	-4.54	0.823	73.6	0.419	0.756	154.0	468.5	0.439	1.073	-4.20	1.209	114.6	7.9	-9.0	0.515
46356.4	46482.0	0.516	348.8	-2.0	-1.08	1.037	64.1	0.482	0.586	141.0	391.7	0.303	0.868	-3.85	2.138	100.2	340.6	-13.0	0.628
6.58	16.53	45.8	+/+	20.3	0.2	197.9	0.0	1.524	1.145	90.4	-20.2	18.328	0.223	5.713	159.0	13.4	22.0	106.3	1.039
46170.0	46360.1	0.282	152.1	-1.8	-4.39	0.814	76.1	0.404	0.751	157.5	468.1	0.447	1.055	-3.53	1.205	113.7	14.2	-7.9	0.493
46360.1	46482.0	0.493	353.7	-2.1	-1.13	1.030	65.3	0.470	0.581	142.1	386.8	0.308	0.854	-3.73	2.134	98.5	343.3	-13.9	0.572
6.06	14.88		+/+	21.2	0.0	203.9	0.0	1.539	1.145	95.4	-15.9	17.694	0.243	5.449	163.3	12.5	24.7	107.8	1.082
46180.0	46363.5	0.255	155.0	-3.7	-4.19	0.806	78.9	0.391	0.747	161.5	467.9	0.455	1.039	-2.84	1.201	112.9	19.8	-6.6	0.474
46363.5	46482.0	0.474	358.1	-2.3	-1.18	1.023	66.4	0.460	0.576	143.2	382.4	0.311	0.841	-3.60	2.131	97.0	346.0	-14.7	0.523
5.61	13.47		+/+	22.0	0.0	209.4	0.0	1.552	1.145	99.8	-11.3	17.139	0.263	5.233	167.8	11.6	27.3	109.1	1.115
46190.0	46366.5	0.232	156.1	-4.7	-3.98	0.799	81.8	0.381	0.743	166.2	467.8	0.460	1.026	-2.15	1.198	112.3	24.8	-5.2	0.458
46366.5	46482.0	0.458	1.9	-2.6	-1.25	1.016	67.4	0.452	0.572	144.3	378.7	0.313	0.831	-3.48	2.128	95.8	348.5	-15.4	0.483
5.23	12.30		+/+	23.0	0.0	214.2	0.0	1.563	1.145	103.8	-6.6	16.699	0.282	5.020	172.3	10.8	29.8	110.3	1.134
46200.0	46368.9	0.214	154.8	-4.6	-3.77	0.793	85.2	0.372	0.741	171.8	467.6	0.466	1.017	-1.47	1.196	111.8	28.8	-3.7	0.446
46368.9	46482.0	0.446	4.9	-2.8	-1.32	1.011	68.1	0.446	0.569	145.2	375.7	0.315	0.823	-3.37	2.126	94.8	350.7	-16.0	0.452
4.94	11.41		+/+	24.0	0.0	218.1	0.0	1.571	1.145	107.0	-2.2	16.386	0.298	4.816	176.1	10.0	31.9	111.1	1.138
46210.0	46370.5	0.204	150.6	-2.9	-3.57	0.791	89.0	0.366	0.741	178.3	467.1	0.470	1.013	-0.83	1.196	111.4	31.7	-2.1	0.437
46370.5	46482.0	0.438	6.8	-2.9	-1.37	1.008	68.6	0.443	0.567	145.9	373.8	0.316	0.818	-3.29	2.124	94.2	352.2	-16.3	0.432
4.80	10.83		+/+	24.9	0.0	220.7	0.0	1.577	1.145	109.2	1.9	16.224	0.309	4.636	176.8	9.3	33.4	111.6	1.125
46220.0	46370.9	0.209	142.5	0.6	-3.43	0.794	93.7	0.365	0.746	186.4	466.2	0.473	1.018A	-0.23	1.199	111.3	32.8	-0.6	0.436
46370.9	46482.0	0.436	7.2	-3.0	-1.38	1.007	68.7	0.442	0.566	146.1	373.3	0.316	0.817	-3.27	2.124	94.1	352.5	-16.4	0.428
4.87	10.71		+/+	25.7	0.0	221.3	0.0	1.578	1.145	109.8	5.4	16.270	0.312	4.502	174.3	8.6	33.7	111.4	1.092
46230.0	46369.0	0.240	134.9	5.3	-3.39	0.807	99.5	0.372	0.759	196.9	464.1	0.477	1.042A	0.34	1.209	111.6	30.8	0.9	0.445
46369.0	46482.0	0.445	5.0	-2.8	-1.32	1.011	68.1	0.446	0.569	145.3	375.5	0.315	0.823	-3.36	2.126	94.8	350.8	-16.0	0.450
5.35	11.36	105.9	+/+	26.1	0.5	218.3	0.0	1.571	1.145	108.0	8.1	16.606	0.299	4.511	171.8	7.5	32.0	110.1	1.027
46240.0	46362.4	0.322	125.8	9.9	-3.65	0.848	107.9	0.400	0.801	212.2	459.3	0.480	1.121A	0.97	1.238	112.9	22.6	2.3	0.480
46362.4	46482.0	0.480	356.8	-2.3	-1.16	1.025	66.1	0.463	0.578	142.8	383.8	0.310	0.845	-3.65	2.132	97.5	345.1	-14.5	0.538
6.83	13.90	878.3	+/+	26.2	3.5	207.6	0.0	1.548	1.145	101.4	10.2	17.454	0.257	5.088	169.8	5.6	26.5	105.9	0.877
								ARRIVAL DATE = 2446484.0											
46140.0	46350.4	0.406	137.3	6.0	-5.20	0.840	66.3	0.485	0.766	147.9	472.3	0.394	1.138	-5.79	1.216	118.8	356.2	-10.2	0.608
46350.4	46484.0	0.608	339.9	-2.8	-1.88	1.044	59.1	0.546	0.591	140.8	413.2	0.268	0.913	-3.99	2.169	108.2	342.2	-9.8	0.842
8.58	22.82	838.9	+/+	17.8	2.6	188.1	0.0	1.499	1.096	82.4	-24.3	20.690	0.160	7.555	154.5	15.6	12.3	104.3	0.873
46150.0	46354.5	0.370	143.9	3.0	-5.07	0.831	69.0	0.462	0.760	150.1	471.3	0.409	1.112	-5.15	1.212	117.3	3.4	-9.7	0.574
46354.5	46484.0	0.574	345.8	-3.0	-1.88	1.037	60.9	0.525	0.585	141.3	407.2	0.278	0.893	-3.77	2.166	105.8	344.9	-10.4	0.759
7.79	20.37	572.5	+/+	18.7	1.9	194.8	0.0	1.517	1.096	88.0	-20.9	19.805	0.180	6.839	158.0	14.9	14.5	105.6	0.925
46160.0	46358.4	0.336	149.7	0.2	-4.89	0.821	71.6	0.441	0.755	152.8	470.5	0.422	1.088	-4.45	1.207	116.1	10.2	-8.9	0.544
46358.4	46484.0	0.544	351.3	-3.2	-1.91	1.029	62.6	0.507	0.580	142.1	401.6	0.286	0.874	-3.56	2.162	103.7	347.5	-11.0	0.686
7.09	18.22	342.4	+/+	19.6	1.2	201.1	0.0	1.532	1.096	93.2	-16.8	19.038	0.200	6.244	162.0	14.1	16.7	107.1	0.974
46170.0	46362.2	0.304	154.5	-2.4	-4.67	0.812	74.3	0.423	0.750	156.0	469.9	0.432	1.067	-3.72	1.203	114.9	16.6	-7.9	0.518
46362.2	46484.0	0.518	356.3	-3.5	-1.96	1.022	64.0	0.492	0.575	143.1	396.5	0.292	0.858	-3.35	2.159	101.8	350.1	-11.5	0.621
6.48	16.33	154.4	+/+	20.6	0.6	207.2	0.0	1.547	1.096	98.0	-12.3	18.377	0.221	5.749	166.4	13.2	19.1	108.7	1.015
46180.0	46365.6	0.275	158.1	-4.4	-4.41	0.804	77.1	0.408	0.745	159.8	469.6	0.441	1.049	-2.98	1.199	114.0	22.4	-6.6	0.495
46365.6	46484.0	0.495	0.8	-3.8	-2.02	1.015	65.3	0.479	0.571	144.2	392.0	0.297	0.845	-3.14	2.156	100.2	352.6	-11.9	0.566
5.94	14.72	20.1	+/+	21.7	0.1	212.8	0.0	1.559	1.096	102.3	-7.5	17.810	0.242	5.339	170.8	12.3	21.4	110.2	1.045
46190.0	46368.7	0.248	160.0	-5.8	-4.15	0.796	80.2	0.395	0.741	164.2	469.3	0.449	1.033	-2.24	1.196	113.2	27.6	-5.2	0.475
46368.7	46484.0	0.476	4.7	-4.1	-2.11	1.008	66.5	0.469	0.567	145.2	388.1	0.301	0.833	-2.94	2.153	98.9	355.0	-12.1	0.520
5.49	13.36		+/+	22.8	0.0	217.8	0.0	1.570	1.096	106.4	-2.8	17.304	0.262	5.054	174.5	11.4	23.5	111.4	1.062
46200.0	46371.3	0.226	159.8	-6.1	-3.88	0.790	83.5	0.384	0.738	169.4	469.0	0.455	1.022	-1.53	1.194	112.5	32.0	-3.7	0.460
46371.3	46484.0	0.460	7.9	-4.4	-2.20	1.002	67.4	0.462	0.564	146.2	384.9	0.303	0.824	-2.76	2.150	97.8	357.2	-12.3	0.482
5.13	12.29		+/+	24.0	0.0	222.0	0.0	1.579	1.096	109.8	1.8	16.922	0.280	4.800	175.5	10.6	25.4	112.2	1.064
46210.0	46373.2	0.211	156.7	-5.0	-3.64	0.787	87.3	0.376	0.737	175.5	468.7	0.460	1.015	-0.86	1.193	112.0	35.3	-2.1	0.449
46373.2	46484.0	0.449	10.2	-4.7	-2.27	0.998	68.1	0.456	0.561	147.0	382.6	0.305	0.817	-2.62	2.148	97.0	358.9	-12.3	0.456
4.90	11.53		+/+	25.2	0.0	225.1	0.0	1.586	1.096	112.4	5.9	16.694	0.294	4.576	173.1	10.0	26.9	112.6	1.051
46220.0	46374.1	0.208	150.7	-2.0	-3.45	0.787	91.7	0.372	0.740	182.9	468.0	0.464	1.015A	-0.23	1.194	111.8	37.2	-0.6	0.444
46374.1	46484.0	0.444	11.2	-4.8	-2.31	0.995	68.4	0.454	0.560	147.4	381.5	0.306	0.814	-2.55	2.148	96.7	359.7	-12.3	0.444
4.86	11.18	125.1	+/+	26.3	0.5	226.6	0.0	1.588	1.096	114.0	9.4	16.577	0.301	4.491	170.2	9.4	27.7	112.2	1.023
46230.0	46373.4	0.227	142.6	2.4	-3.35	0.796	97.1	0.375	0.749	192.1	466.5	0.468	1.029A	0.34	1.201	111.9	36.7	0.8	0.448
46373.4	46484.0	0.448	10.4	-4.7	-2.28	0.998	68.2	0.456	0.561	147.1	382.4	0.305	0.816	-2.60	2.148	97.0	359.0	-12.3	0.454
5.14	11.46	366.9	+/+	26.9	1.6	225.4	0.0	1.586	1.096	114.0	12.1	16.673	0.295	4.556	167.8	8.7	27.1	110.9	0.973

DEPART PASS DV1	PASS ARRIVE DV2	SPEED SPEED DELVC	R A DECL R A LEG	DECL KAPPA	I 1 I 1 DELK	V 1 V 1 RAS	PSI 1 ECCEN DECLS	ECCEN CDIST1	SMA SMA CDIST2	THET1 THET1 RAP	THET2 THET2 DECLP	PERIH PERIH VP	APHEL APHEL -A	I 2 I 2 E	V 2 V 2 INCL	PSI 2 PSI 2 LAM1	R A R A LAM2	DECL DECL ETA	SPEED SPEED PERIC
46240.0	46369.7	0.282	134.1	7.1	-3.45	0.821	104.1	0.391	0.773	204.5	463.3	0.470	1.075A	0.91	1.219	112.7	32.4	2.2	0.469
46369.7	46484.0	0.469	6.0	-4.2	-2.14	1.006	66.8	0.466	0.566	145.6	386.8	0.302	0.829	-2.88	2.152	98.5	355.9	-12.2	0.505
6.07	12.94	877.8	+/+	27.1	3.6	219.4	0.0	1.574	1.096	110.8	13.8	17.190	0.269	4.906	166.2	7.4	24.3	108.1	0.878
							ARRIVAL DATE = 2446486.0												
46150.0	46356.5	0.404	145.1	2.8	-5.58	0.829	66.6	0.491	0.759	149.3	473.8	0.387	1.132	-5.55	1.211	119.2	5.4	-9.6	0.612
46356.5	46486.0	0.612	348.2	-3.9	-2.68	1.029	58.8	0.556	0.580	142.7	417.7	0.257	0.903	-3.64	2.180	109.9	352.3	-9.0	0.832
8.53	22.50	947.3	+/+	18.0	3.0	198.0	0.0	1.525	1.044	90.6	-18.4	20.796	0.158	7.643	160.1	15.8	10.4	106.5	0.852
46160.0	46360.4	0.366	151.3	-0.2	-5.30	0.820	69.5	0.466	0.753	151.7	472.7	0.402	1.105	-4.76	1.206	117.7	12.4	-8.9	0.576
46360.4	46486.0	0.577	353.8	-4.1	-2.67	1.021	60.8	0.535	0.575	143.3	412.0	0.268	0.882	-3.35	2.176	107.6	355.0	-9.3	0.749
7.70	20.06	705.8	+/+	19.0	2.4	204.4	0.0	1.540	1.044	96.0	-14.2	19.871	0.178	6.891	164.2	14.9	12.1	107.9	0.899
46170.0	46364.2	0.330	156.6	-2.8	-4.99	0.810	72.3	0.445	0.748	154.6	471.9	0.415	1.081	-3.95	1.202	116.3	18.9	-7.8	0.545
46364.2	46486.0	0.545	359.0	-4.4	-2.69	1.013	62.5	0.516	0.570	144.2	406.7	0.276	0.864	-3.06	2.173	105.5	357.5	-9.5	0.676
6.98	17.93	509.8	+/+	20.1	1.8	210.5	0.0	1.554	1.044	100.9	-9.5	19.075	0.199	6.271	168.5	13.9	14.0	109.3	0.940
46180.0	46367.7	0.297	160.8	-5.1	-4.66	0.801	75.3	0.426	0.743	158.1	471.3	0.426	1.060	-3.14	1.198	115.2	25.0	-6.6	0.518
46367.7	46486.0	0.518	3.6	-4.8	-2.74	1.006	64.1	0.501	0.566	145.1	402.0	0.282	0.849	-2.79	2.170	103.7	360.0	-9.6	0.613
6.35	16.10	371.4	+/+	21.4	1.4	216.2	0.0	1.567	1.044	105.4	-4.7	18.393	0.221	5.761	172.5	13.0	15.9	110.7	0.969
46190.0	46370.9	0.267	163.6	-6.7	-4.32	0.793	78.4	0.410	0.739	162.3	470.9	0.435	1.042	-2.35	1.194	114.2	30.4	-5.2	0.495
46370.9	46486.0	0.495	7.6	-5.2	-2.81	0.999	65.4	0.486	0.562	146.2	397.9	0.287	0.836	-2.53	2.167	102.2	2.3	-9.6	0.561
5.81	14.55	296.3	+/+	22.7	1.2	221.3	0.0	1.578	1.044	109.5	0.0	17.820	0.242	5.346	174.7	12.1	17.8	111.8	0.985
46200.0	46373.6	0.241	164.3	-7.5	-4.00	0.787	81.8	0.397	0.735	167.1	470.6	0.443	1.028	-1.59	1.191	113.4	35.1	-3.7	0.476
46373.6	46486.0	0.476	10.9	-5.6	-2.90	0.993	56.6	0.478	0.558	147.2	394.5	0.291	0.825	-2.29	2.164	101.0	4.4	-9.4	0.517
5.37	13.30	286.7	+/+	24.1	1.2	225.8	0.0	1.587	1.044	113.2	4.6	17.357	0.261	5.021	173.5	11.3	19.6	112.5	0.988
46210.0	46375.8	0.221	162.5	-6.9	-3.71	0.782	85.5	0.387	0.734	172.8	470.2	0.450	1.018	-0.89	1.189	112.7	38.8	-2.1	0.462
46375.8	46486.0	0.462	13.4	-5.9	-2.98	0.988	67.5	0.471	0.555	148.1	391.9	0.294	0.817	-2.09	2.162	100.1	6.2	-9.2	0.485
5.05	12.37	341.2	+/+	25.6	1.4	229.3	0.0	1.594	1.044	116.2	8.6	17.011	0.278	4.783	170.5	10.7	21.0	112.8	0.977
46220.0	46377.1	0.211	157.5	-4.5	-3.47	0.781	89.8	0.381	0.735	179.7	469.6	0.455	1.014	-0.24	1.190	112.4	41.2	-0.6	0.453
46377.1	46486.0	0.454	14.9	-6.1	-3.04	0.985	68.0	0.467	0.554	148.7	390.3	0.295	0.812	-1.97	2.161	99.5	7.3	-9.0	0.467
4.91	11.83	462.5	+/+	26.8	2.0	231.4	0.0	1.598	1.044	118.4	12.1	16.808	0.288	4.646	167.5	10.2	22.0	112.5	0.954
46230.0	46377.2	0.219	150.1	-0.5	-3.31	0.786	94.9	0.380	0.740	188.0	468.5	0.459	1.022A	0.34	1.194	112.3	41.9	0.8	0.453
46377.2	46486.0	0.453	15.0	-6.1	-3.04	0.985	68.1	0.466	0.554	148.7	390.2	0.295	0.812	-1.96	2.161	99.5	7.4	-9.0	0.466
5.03	11.80	672.1	+/+	27.7	2.9	231.5	0.0	1.598	1.044	119.2	14.8	16.799	0.288	4.640	165.0	9.7	22.0	111.5	0.915
							ARRIVAL DATE = 2446488.0												
46170.0	46366.2	0.360	158.5	-3.2	-5.34	0.809	70.1	0.469	0.746	153.4	474.0	0.396	1.097	-4.22	1.200	117.9	21.2	-7.8	0.577
46366.2	46488.0	0.577	1.6	-5.1	-3.36	1.005	50.8	0.543	0.565	145.3	417.2	0.258	0.872	-2.85	2.176	109.4	5.3	-8.0	0.735
7.58	19.66	912.6	+/+	19.7	3.0	213.8	0.0	1.562	0.989	103.8	-7.6	19.883	0.178	6.901	169.8	14.8	9.7	109.8	0.862
46180.0	46369.8	0.323	163.3	-5.6	-4.93	0.799	73.2	0.447	0.741	156.6	473.2	0.410	1.073	-3.33	1.196	116.5	27.4	-6.6	0.545
46369.8	46488.0	0.545	6.3	-5.5	-3.36	0.997	62.6	0.524	0.560	146.1	412.3	0.266	0.854	-2.52	2.172	107.4	7.8	-7.9	0.664
6.83	17.59	763.3	+/+	21.1	2.7	219.6	0.0	1.574	0.989	108.5	-2.8	19.065	0.199	6.264	173.2	13.8	11.1	111.0	0.892
46190.0	46373.0	0.289	166.8	-7.5	-4.52	0.791	76.5	0.428	0.737	160.4	472.6	0.421	1.052	-2.47	1.192	115.3	33.0	-5.2	0.517
46373.0	46488.0	0.518	10.4	-5.9	-3.40	0.990	64.2	0.509	0.556	147.1	408.0	0.273	0.839	-2.20	2.169	105.8	10.1	-7.6	0.605
6.19	15.85	678.4	+/+	22.6	2.5	224.8	0.0	1.585	0.989	112.8	1.9	18.375	0.221	5.747	174.1	12.8	12.7	112.0	0.909
46200.0	46375.9	0.259	168.5	-8.6	-4.13	0.784	79.9	0.412	0.733	165.0	472.1	0.431	1.035	-1.67	1.189	114.3	38.0	-3.6	0.495
46375.9	46488.0	0.495	13.9	-6.3	-3.45	0.984	65.6	0.496	0.553	148.1	404.4	0.278	0.827	-1.92	2.167	104.4	12.2	-7.3	0.556
5.66	14.41	659.0	+/+	24.2	2.6	229.5	0.0	1.594	0.989	116.7	6.4	17.809	0.242	5.339	171.9	12.1	14.3	112.7	0.915
46210.0	46378.3	0.234	167.8	-8.5	-3.78	0.778	83.7	0.400	0.731	170.3	471.7	0.439	1.022	-0.92	1.186	113.5	42.0	-2.1	0.477
46378.3	46488.0	0.477	16.6	-6.6	-3.52	0.979	66.8	0.487	0.550	149.1	401.5	0.282	0.818	-1.68	2.165	103.3	14.0	-6.8	0.518
5.25	13.32	701.8	+/+	25.8	2.8	233.3	0.0	1.602	0.989	120.0	10.3	17.372	0.260	5.031	168.8	11.5	15.7	112.9	0.908
46220.0	46379.9	0.218	164.0	-6.8	-3.49	0.776	87.9	0.391	0.730	176.7	471.2	0.445	1.016	-0.25	1.186	113.0	45.0	-0.6	0.465
46379.9	46488.0	0.465	18.4	-6.9	-3.57	0.975	67.5	0.480	0.548	149.8	399.5	0.285	0.811	-1.51	2.163	102.6	15.3	-6.5	0.493
5.00	12.59	807.9	+/+	27.2	3.3	236.0	0.0	1.607	0.989	122.5	13.7	17.081	0.274	4.831	165.8	11.0	16.7	112.7	0.890
46230.0	46380.6	0.217	157.4	-3.3	-3.28	0.779	92.8	0.387	0.734	184.4	470.3	0.450	1.018A	0.35	1.188	112.7	46.4	0.8	0.460
46380.6	46488.0	0.460	19.1	-7.1	-3.60	0.974	57.8	0.478	0.547	150.1	398.8	0.286	0.809	-1.44	2.163	102.3	15.8	-6.3	0.484
4.99	12.32	988.9	+/+	28.4	4.1	237.0	0.0	1.608	0.989	124.0	16.4	16.974	0.279	4.758	163.4	10.6	17.1	111.9	0.860

Appendix

MAGNETIC TAPE DATA DESCRIPTION

The magnetic tape contains a data record for each trajectory contained in the tabular data. In order to make the tape compatible with the 7090/7094 DCS (and at the same time usable with "third generation" computers) a blocked, BCD tape format was used. The tape is set up as follows:

1. 7-track
2. blocked BCD
3. 20 records per block
4. 132 characters per record

An identification record precedes each set of data associated with a particular launch opportunity and trajectory mode, and an end-of-file separates the direct data (contained in the first file) from the Venus swingby data. Other than this, the data contained on the tape is the same as that printed in the tabular listings (excluding, of course, the parameter headings and separate arrival date). There are two data records per direct mission and three data records per Venus swingby mission.

The identification record is composed of a 4-digit integer defining the launch year (i.e., 1973, 1974, etc.), a 2-digit integer defining the trajectory mode, and an integer indicating the number of data records following the identification record. The following indices are used to define the trajectory mode:

1 = direct
21 = Venus swingby

The identification record format is:

Character Number	Field	Definition
1	blank	
2 - 5	I 4	Launch Year
6 - 11	blank	
12 - 13	I 2	Index
14 - 20	blank	
21 - 24	I 4	Number of Data Records
25 - 132	blank	

The format of the trajectory data is given in Tables A-1 (direct) and A-2 (Venus swingby).

TABLE A-1

DIRECT TRAJECTORY DATA STORAGE FORMAT

Character Number	Field	Definition
1	blank	
2 - 8	F7.1	DEPART
9	blank	
10 - 16	F7.1	ARRIVE
17 - 23	F7.3	SPEED
24 - 29	F6.1	RA
30 - 35	F6.1	DECL
36 - 42	F7.2	I 1
43 - 48	F6.3	V 1
49 - 54	F6.1	PSI 1
55 - 60	F6.3	ECCEN
61	blank	
62 - 68	F7.3	SMA
69 - 74	F6.1	THET1
75 - 80	F6.1	THET2
81 - 86	F6.3	PERIH
87	A1	
88 - 94	F7.3*	APHEL
95	A1	
96 - 102	F7.2	I 2
103 - 108	F6.3	V 2
109 - 114	F6.1	PSI 2
115 - 120	F6.1	RA
121 - 126	F6.1	DECL
127 - 132	F6.3	SPEED
1 - 17	blank	
18 - 23	F6.2	DV1
24 - 29	F6.2	DV2
30 - 35	F6.2	DVT
36 - 38	blank	
39 - 41	A3	LEG
42 - 48	F7.3	CDIST
49 - 54	F6.1	RAS
55 - 61	F7.1	DECLS
62 - 69	F8.1	LAMDA
70 - 132	blank	

* Written as 0.0 if ECCEN is greater than or equal to 1.0. Column 95 will be blank.

TABLE A-2

VENUS SWINGBY DATA STORAGE FORMAT

Character Number	Field	Definition
Records 1 & 2*		
1	blank	
2 - 8	F7.1	DEPART (PASS)
9	blank	
10 - 16	F7.1	PASS (ARRIVE)
17 - 23	F7.3	SPEED
24 - 29	F6.1	RA
30 - 35	F6.1	DECL
36 - 41	F6.2	I 1
42 - 47	F6.3	V 1
48 - 53	F6.1	PSI 1
54 - 59	F6.3	ECCEN
60	blank	
61 - 67	F7.3	SMA
68 - 73	F6.1	THET1
74 - 79	F6.1	THET2
80 - 85	F6.3	PERIH
86	A1	
87 - 93	F7.3**	APHEL
94	A1	
95 - 100	F6.2	I 2
101 - 106	F6.3	V 2
107 - 112	F6.1	PSI 2
113	blank	
114 - 119	F6.1	RA
120 - 125	F6.1	DECL
126 - 132	F7.3	SPEED
Record 3		
1	blank	
2 - 8	F7.2	DV1
9	blank	
10 - 16	F7.2	DV2
17 - 23	F7.1	DELVC
24 - 26	blank	
27 - 29	A3	LEG
30 - 35	F6.1	KAPPA
36 - 41	F6.1	DELK
42 - 47	F6.1	RAS
48 - 53	F6.1	DECLS
54 - 59	F6.3	CDIST1
60 - 67	F8.3	CDIST2
68 - 73	F6.1	RAP

* Record 1 contains the data for the Earth-Venus transfer, Record 2 contains the data for the Venus-Mercury transfer

** Written as -0.0 if ECCEN is greater than or equal to 1.0. Column 94 will be blank.

TABLE A-2 (Continued)

Character Number	Field	Definition
74 - 79	F6.1	DECLP
80 - 86	F7.3	VP
87 - 93	F7.3	-A
94	blank	
95 - 100	F6.3	E
101 - 106	F6.1	INCL
107 - 112	F6.1	LAM1
113 - 119	F7.1	LAM2
120 - 125	F6.1	ETA
126 - 132	F7.3	PERIC

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